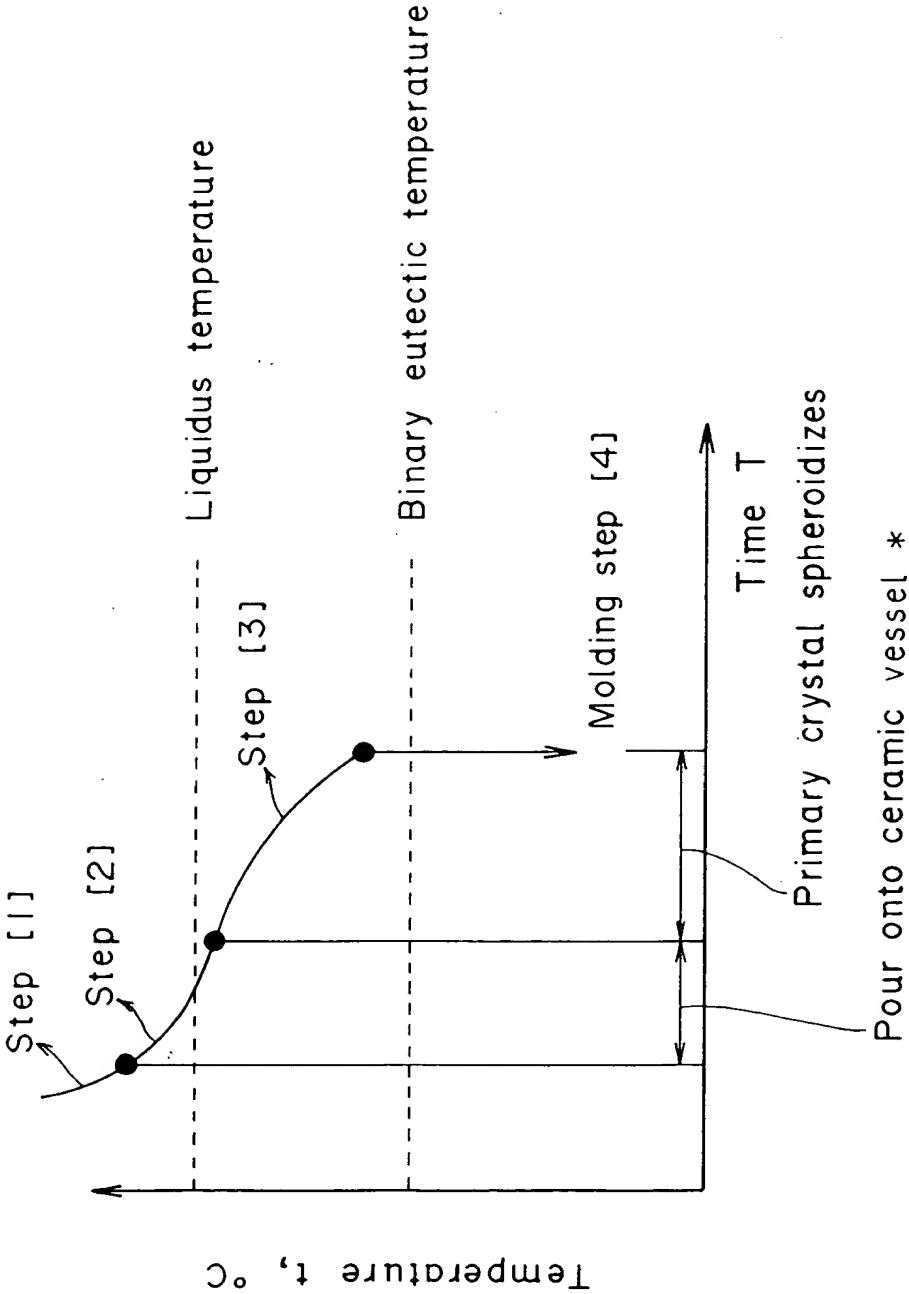


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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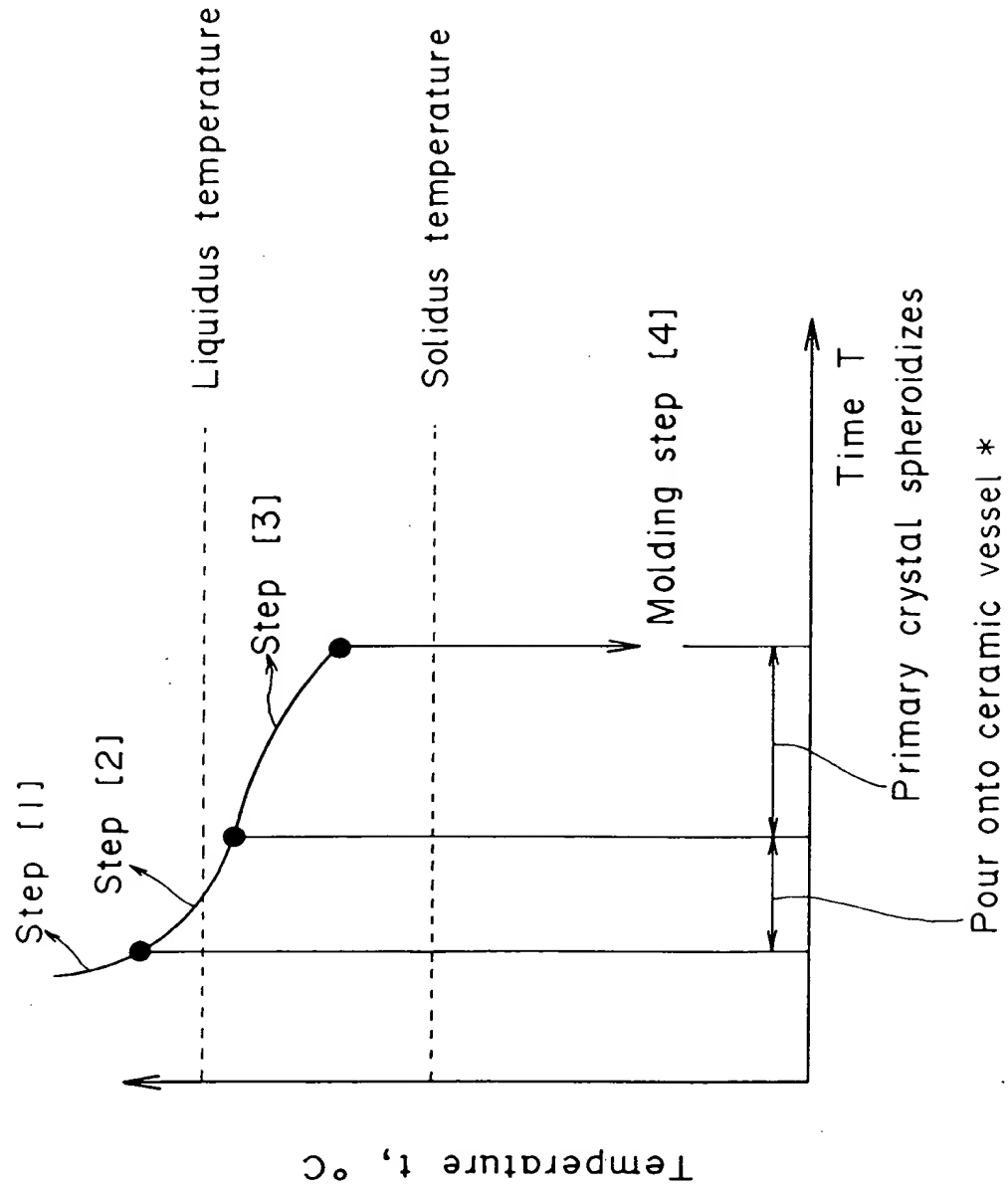
118 672378

FIG. 1



* With or without cooling jig

FIG. 2



*With or without cooling jig

FIG. 3

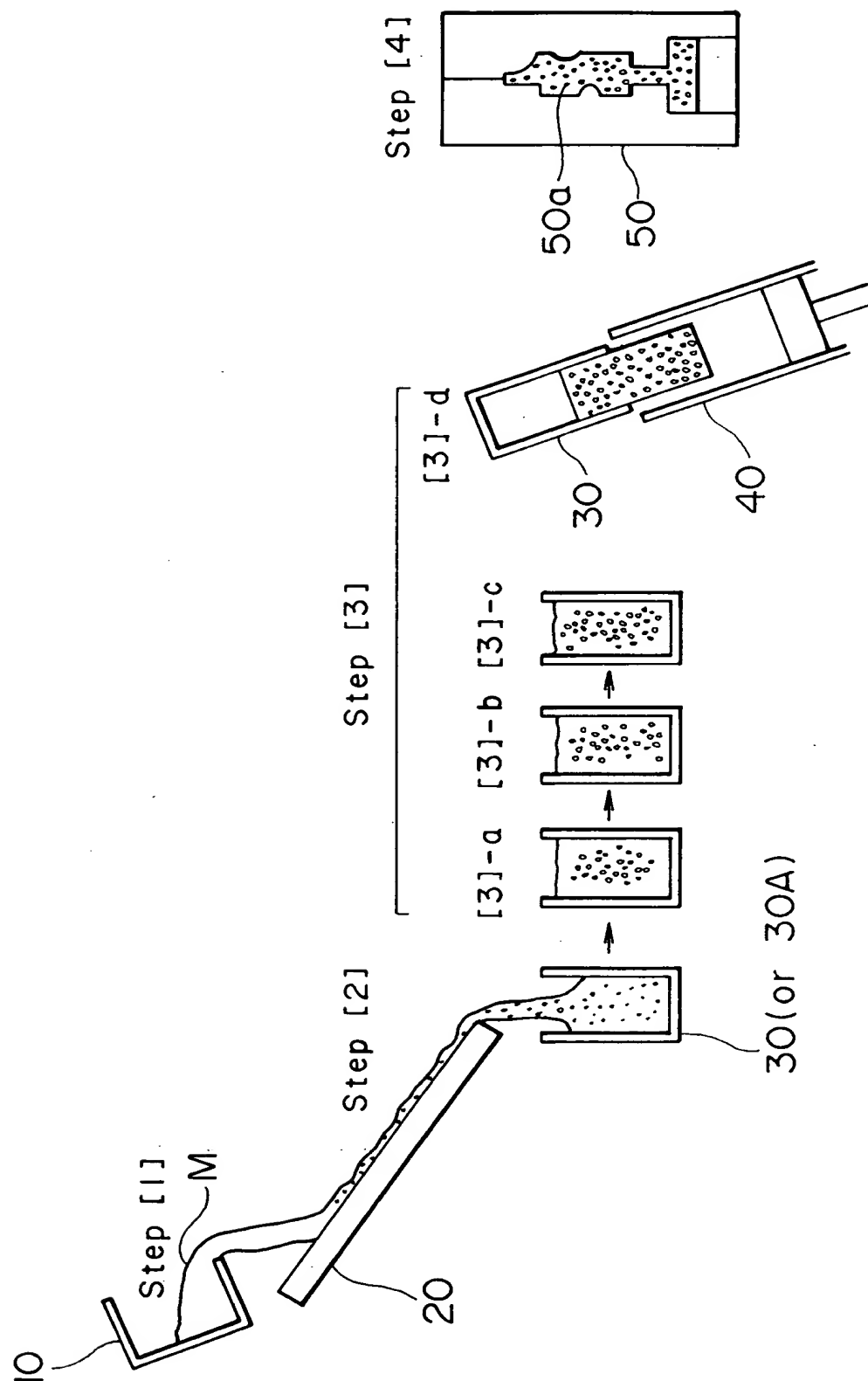
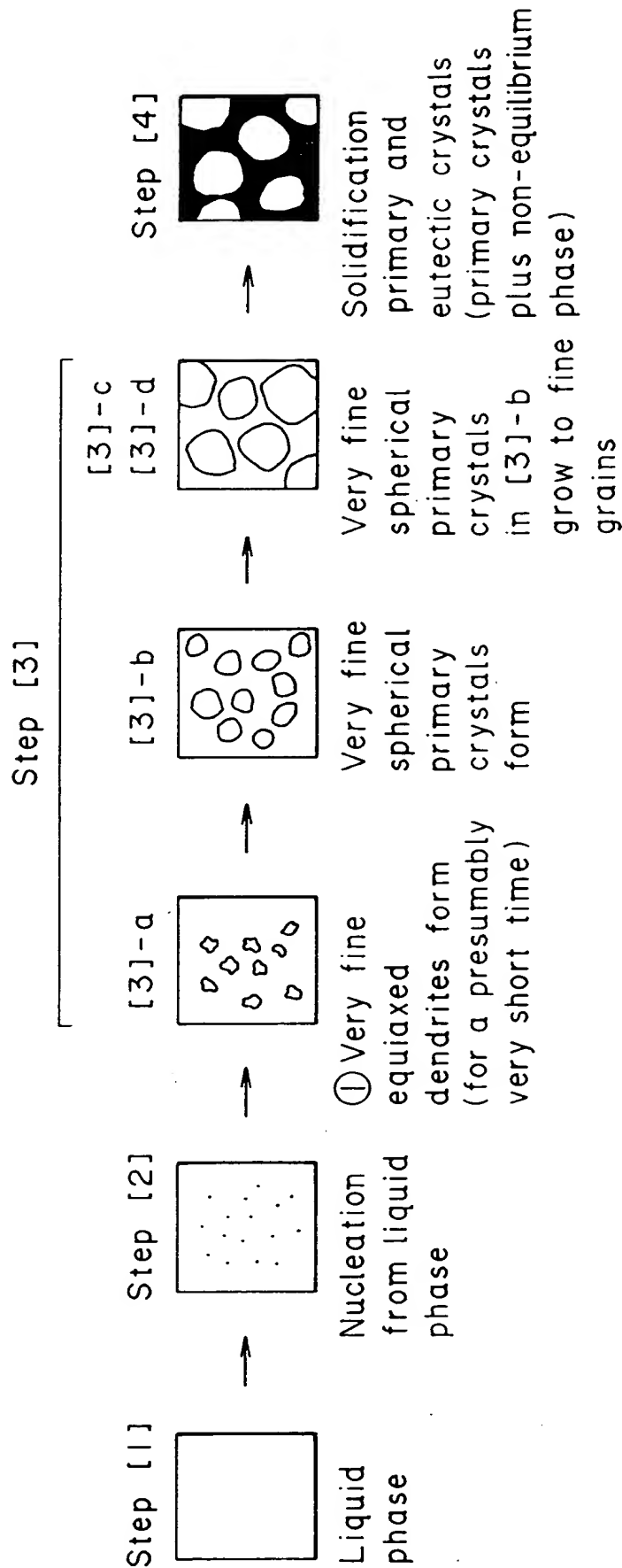


FIG. 4



NR 672378

FIG. 5

Superheated to no more than 100°C
(without cooling jig) or 300°C
(with cooling jig) above liquidus temperature

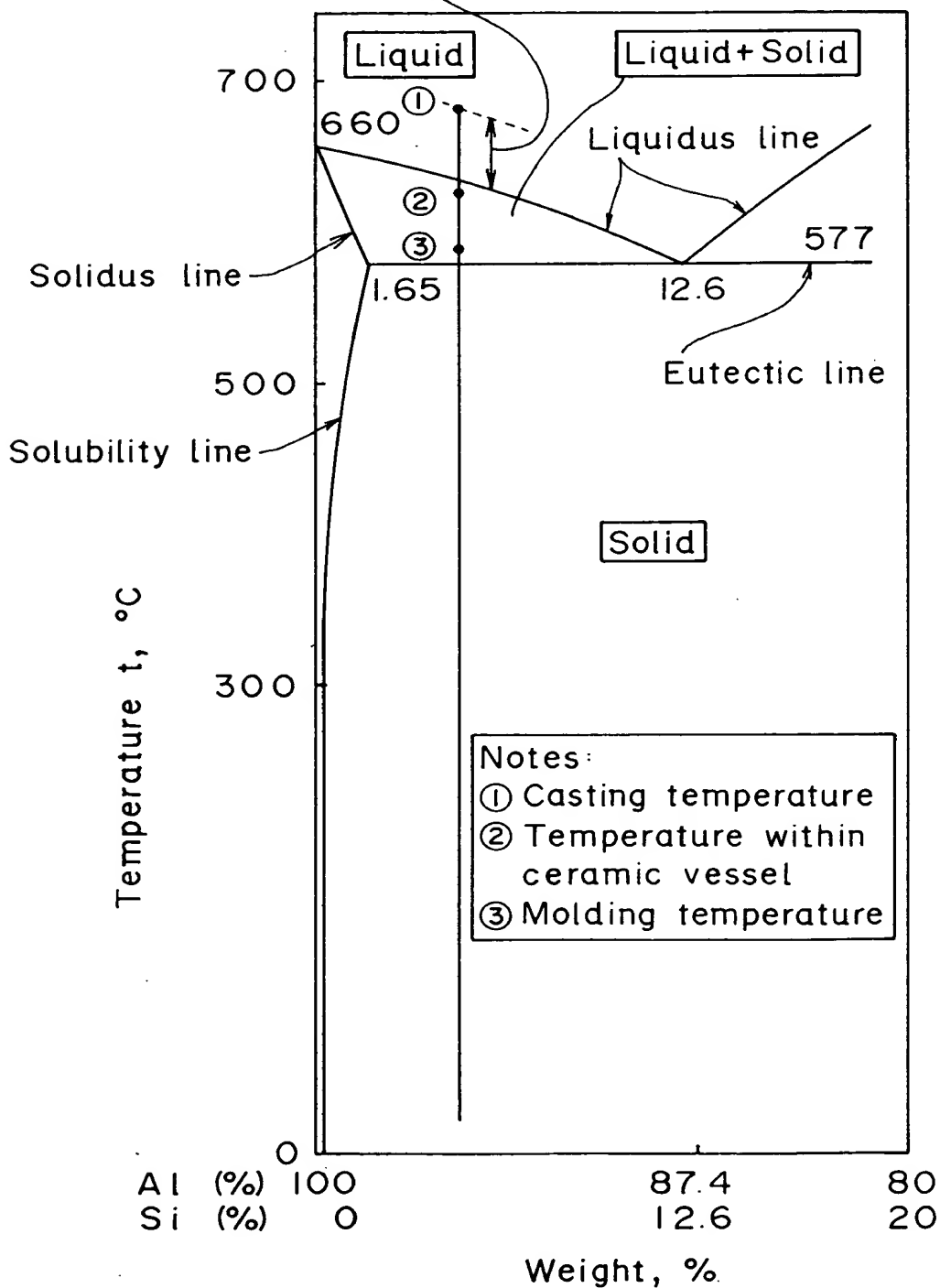
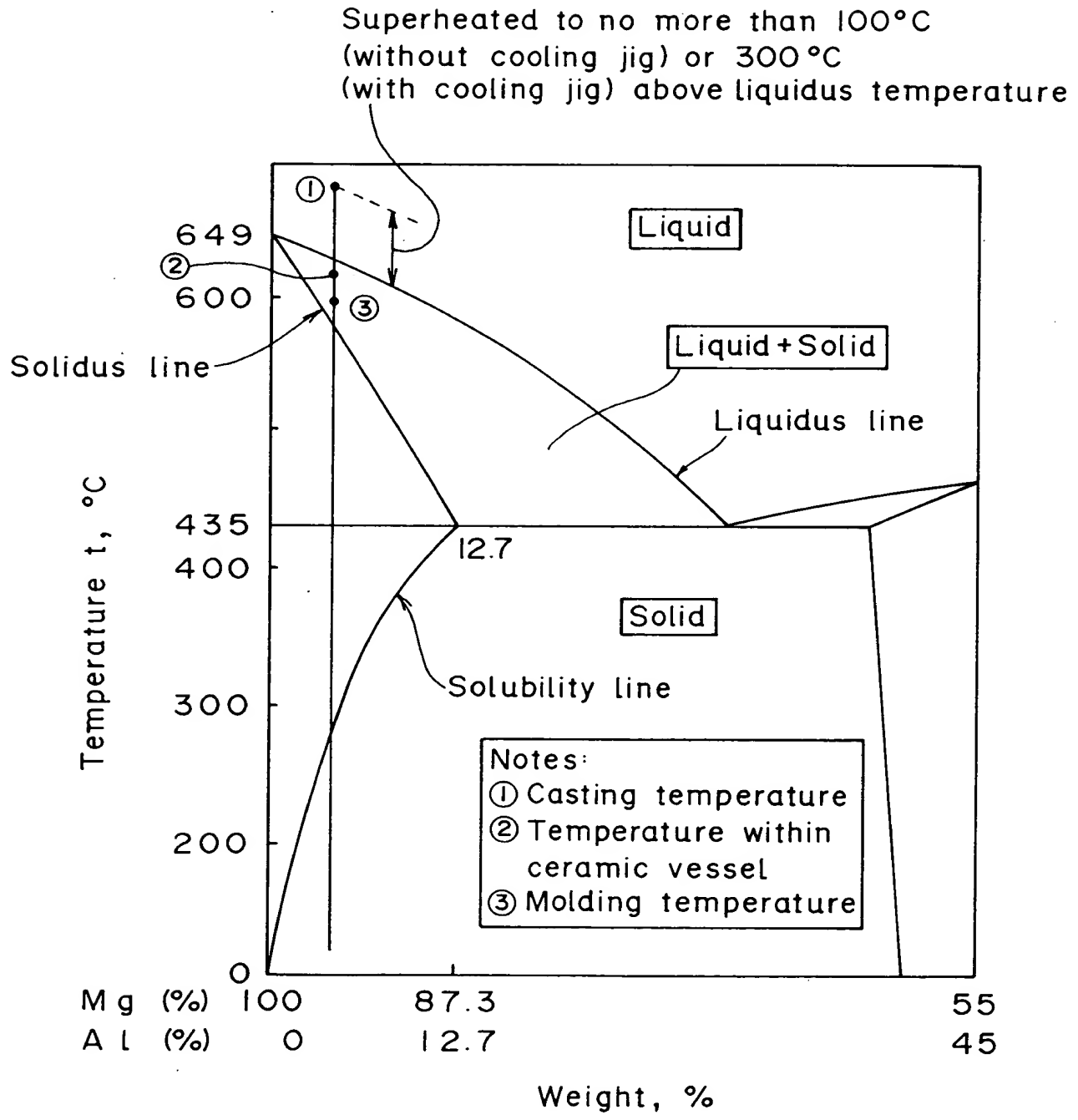


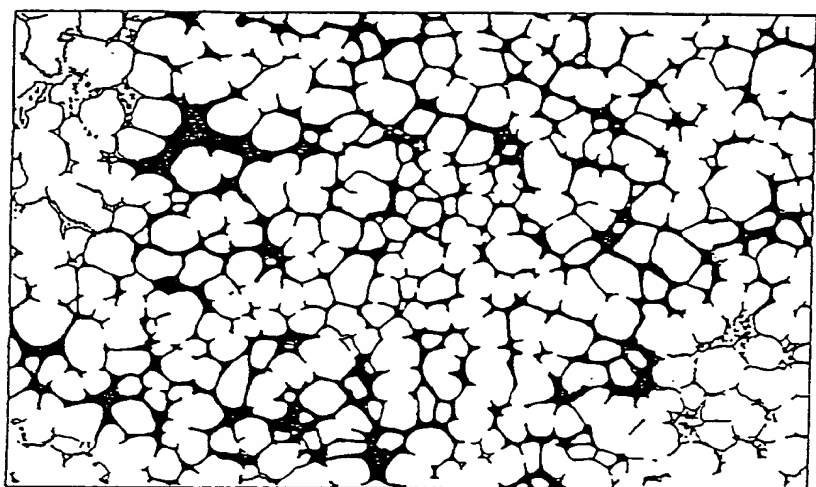
FIG. 6



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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NR 672378

FIG. 7



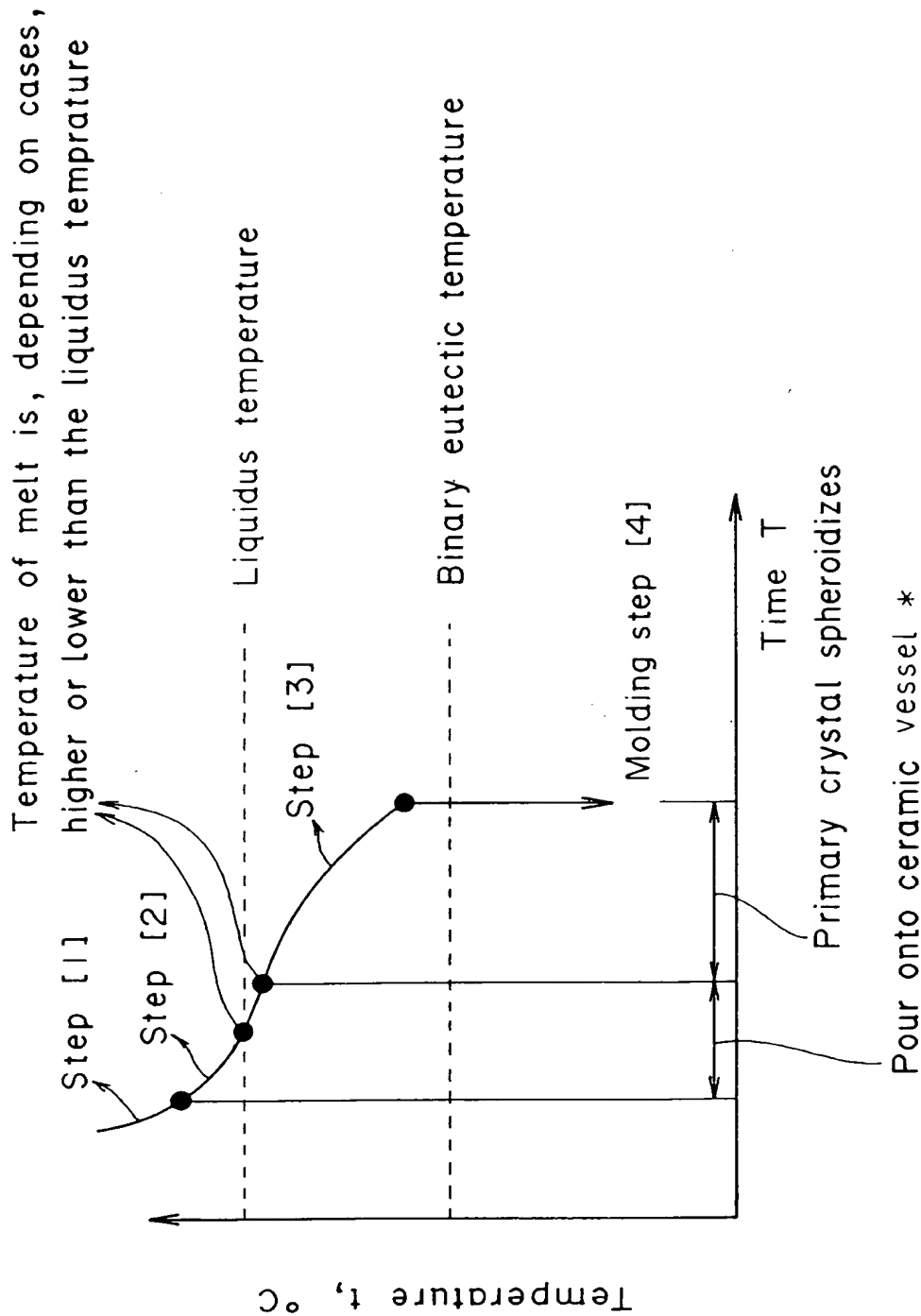
100μm

FIG. 8 Prior Art



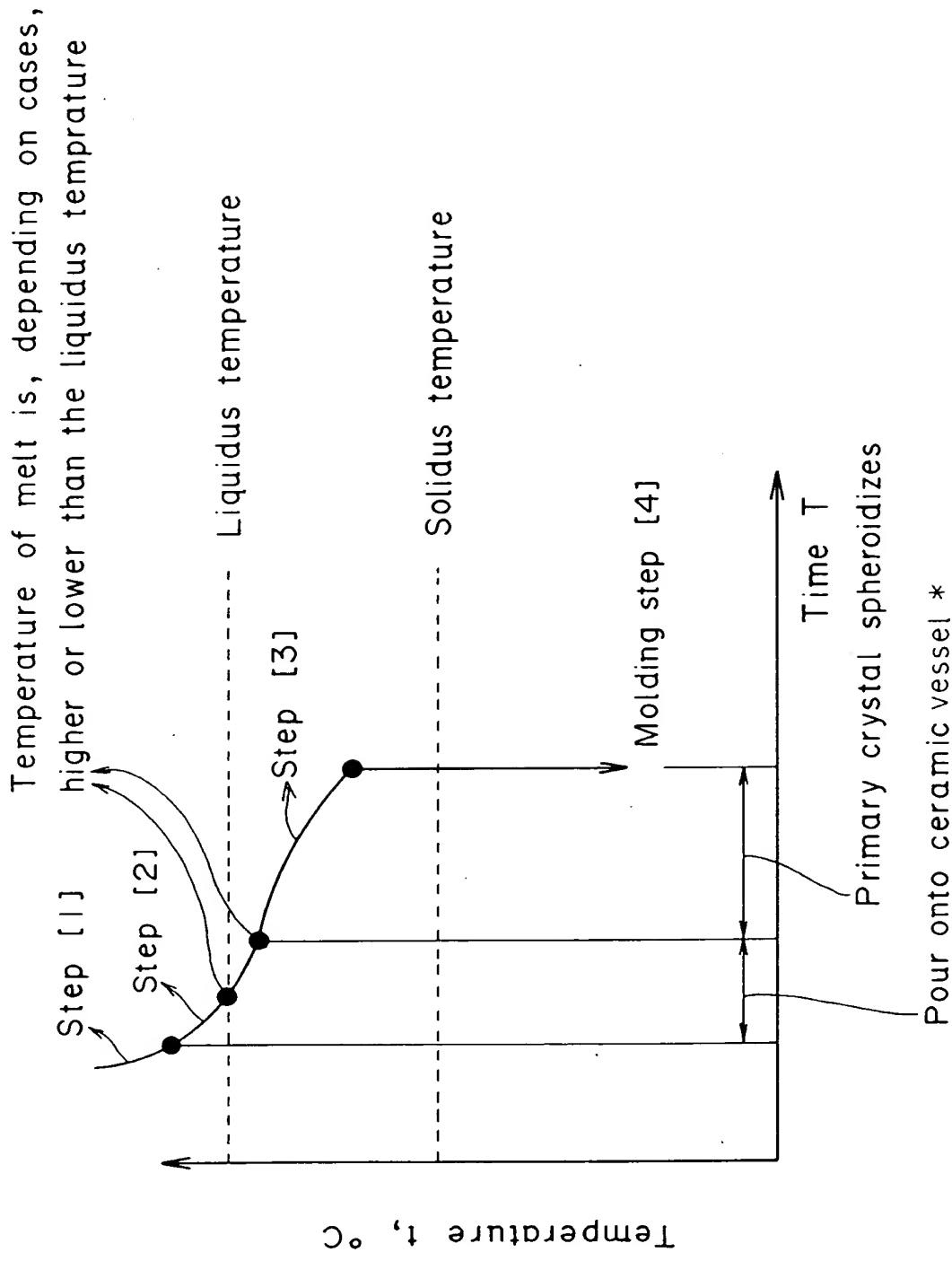
100μm

FIG. 9



* With or without cooling jig

FIG. 10



* With or without cooling jig

FIG. II

Temperature of melt is, depending on cases, higher or lower than the liquidus temperature

Superheated to no more than 100°C (without cooling jig) or 300°C (with cooling jig) above liquidus temperature

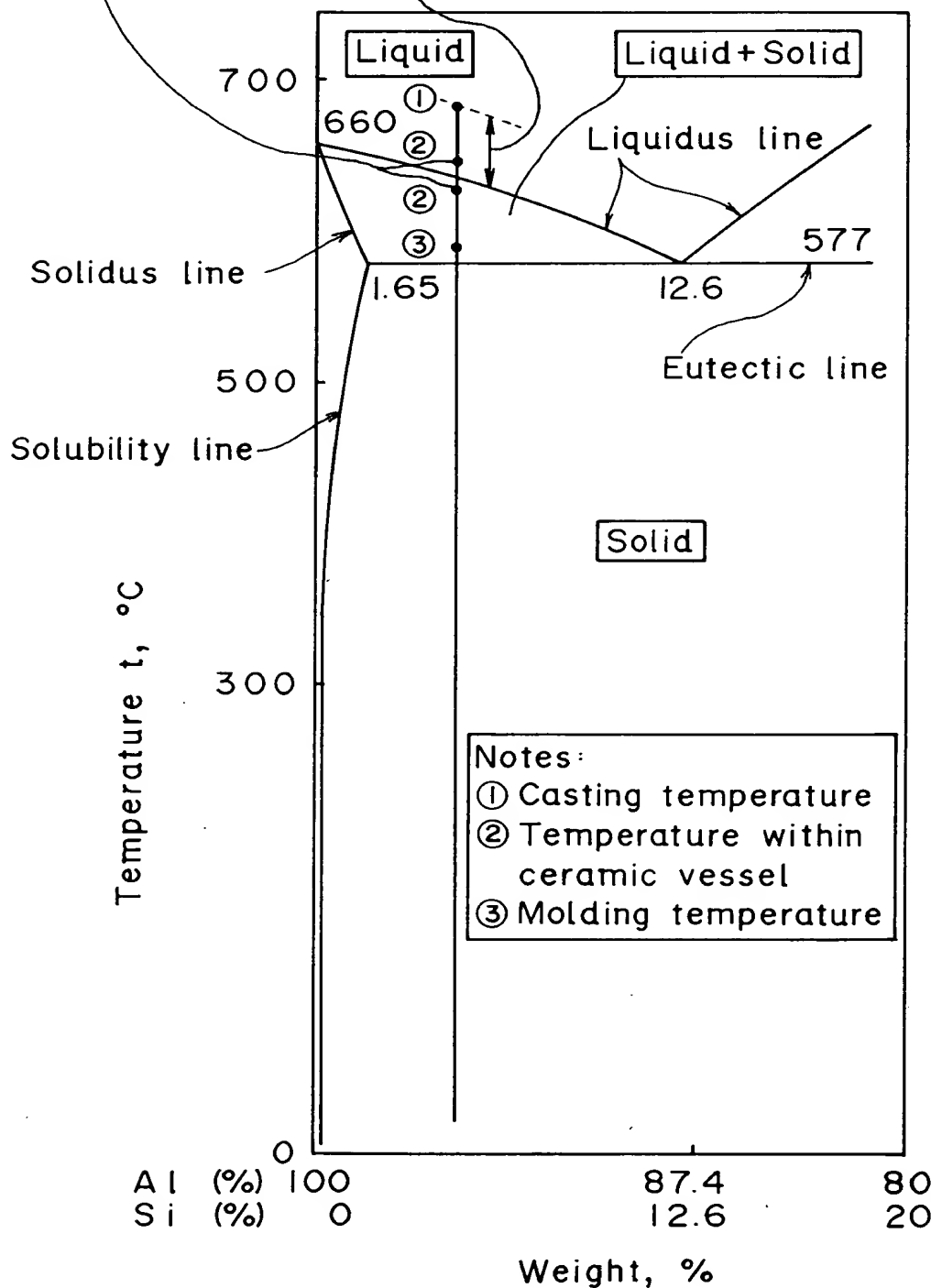


FIG. 12

Temperature of melt is, depending on cases, higher or lower than the liquidus temperature

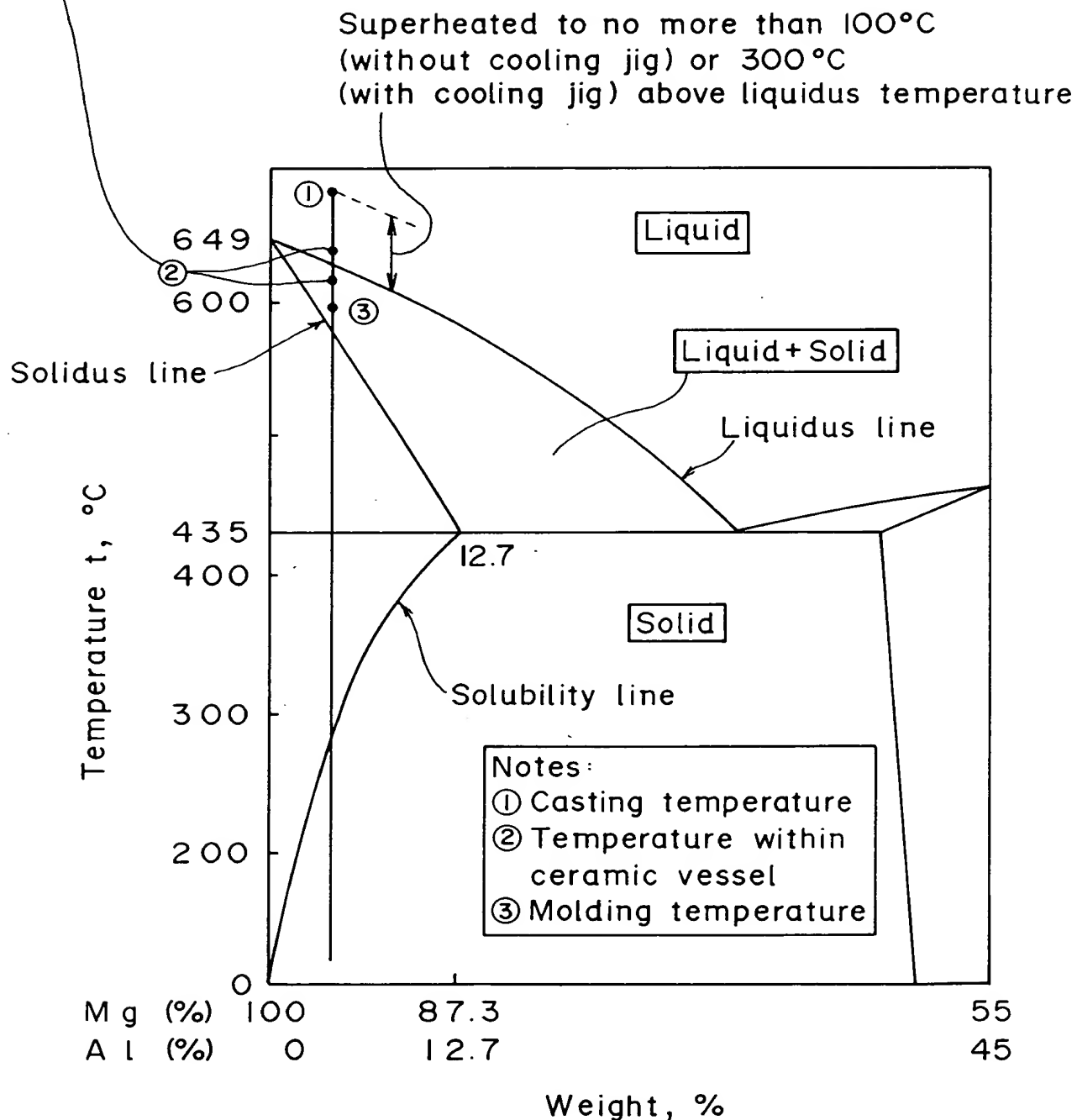


FIG. 13

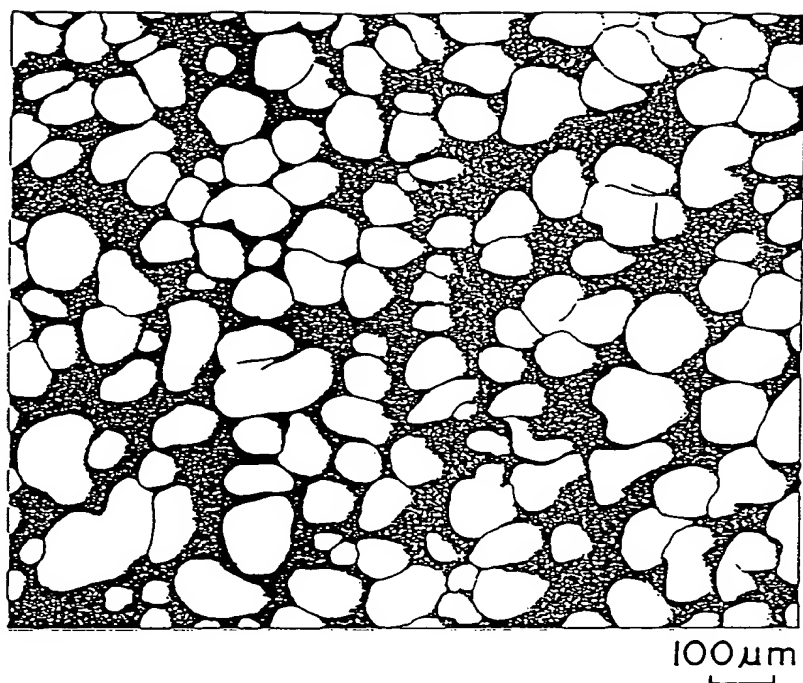
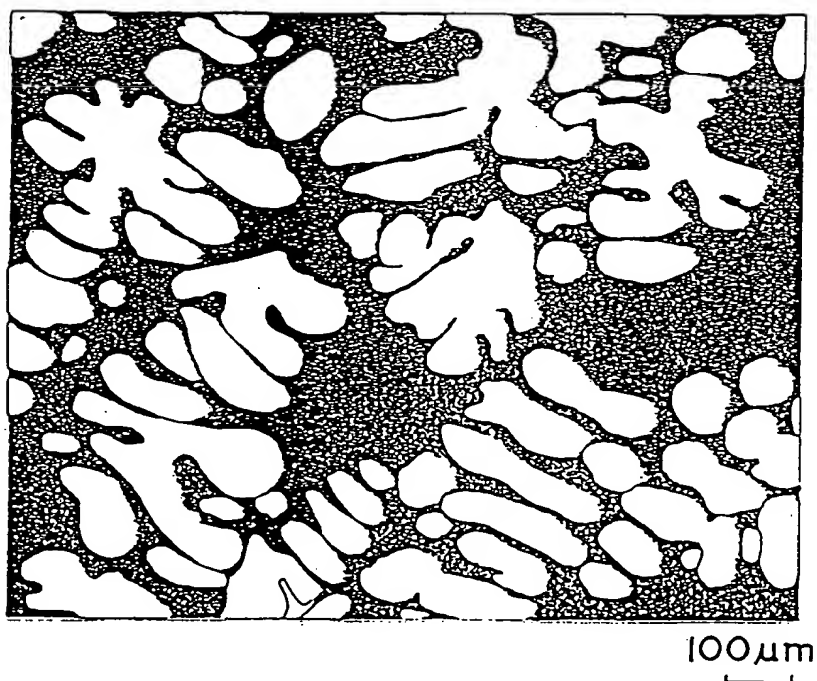


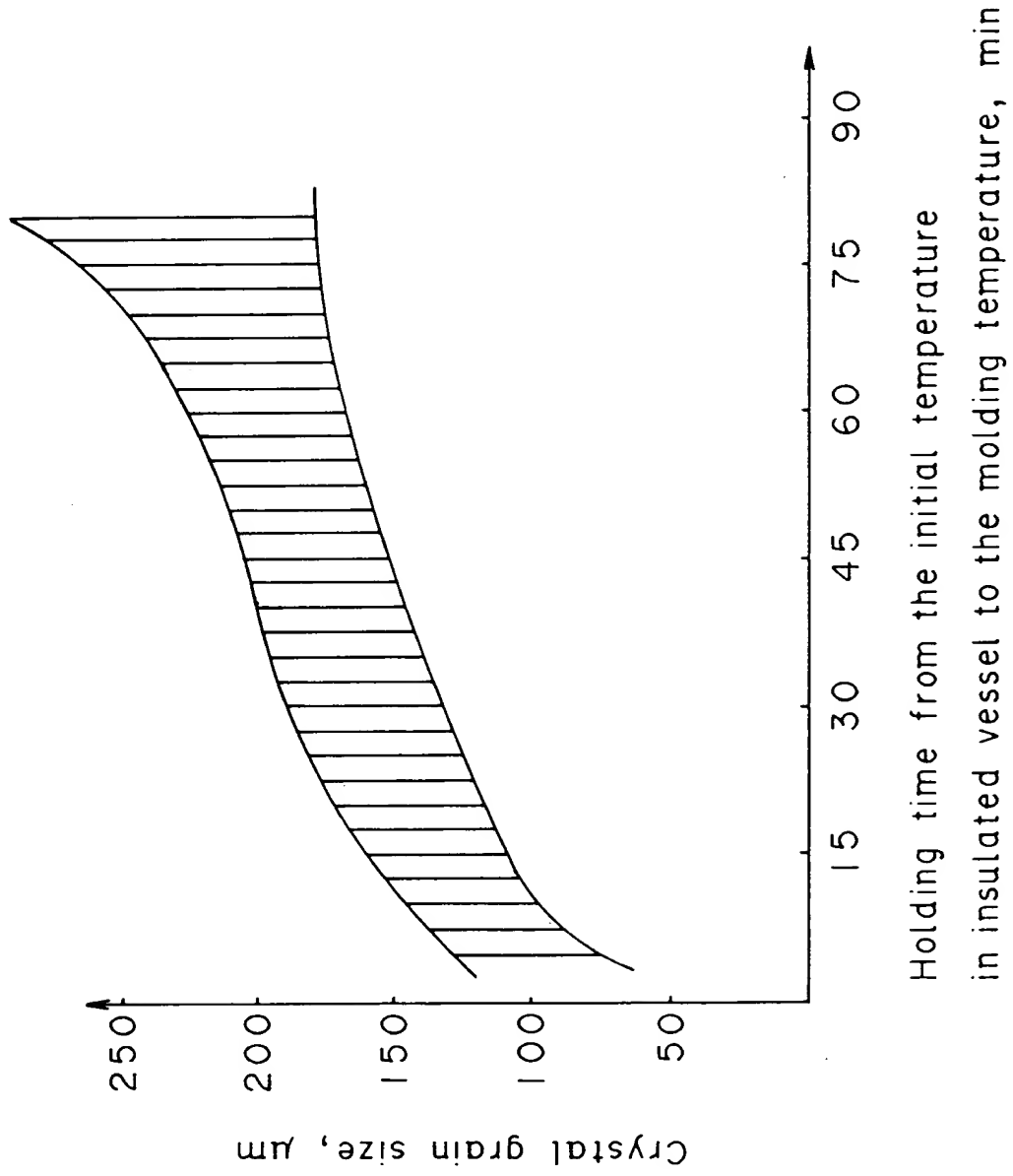
FIG. 14 Prior Art



APPROVED	O.G. FIG.	
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 672378

FIG. 15



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

672378

FIG. 16

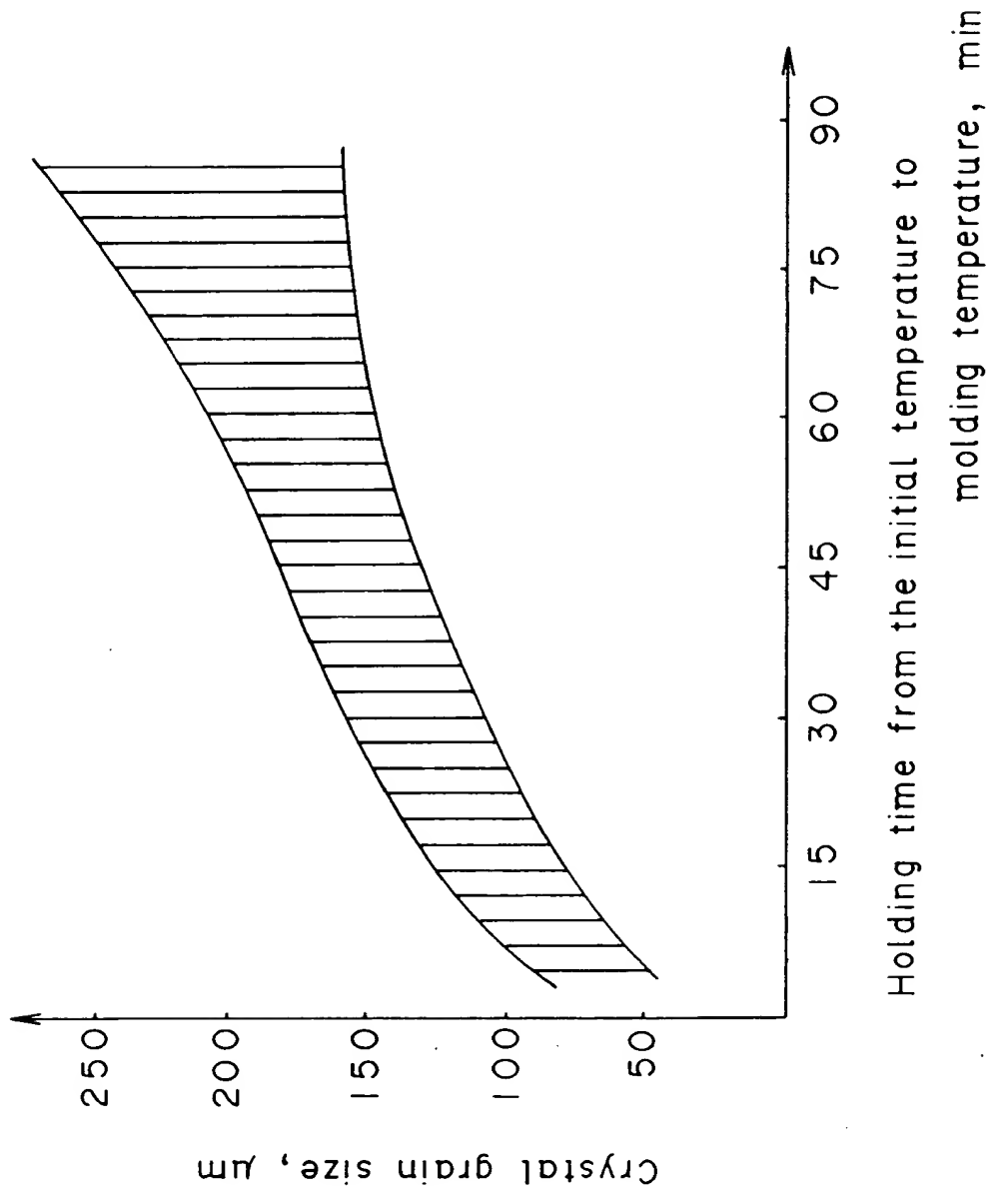


FIG. 17

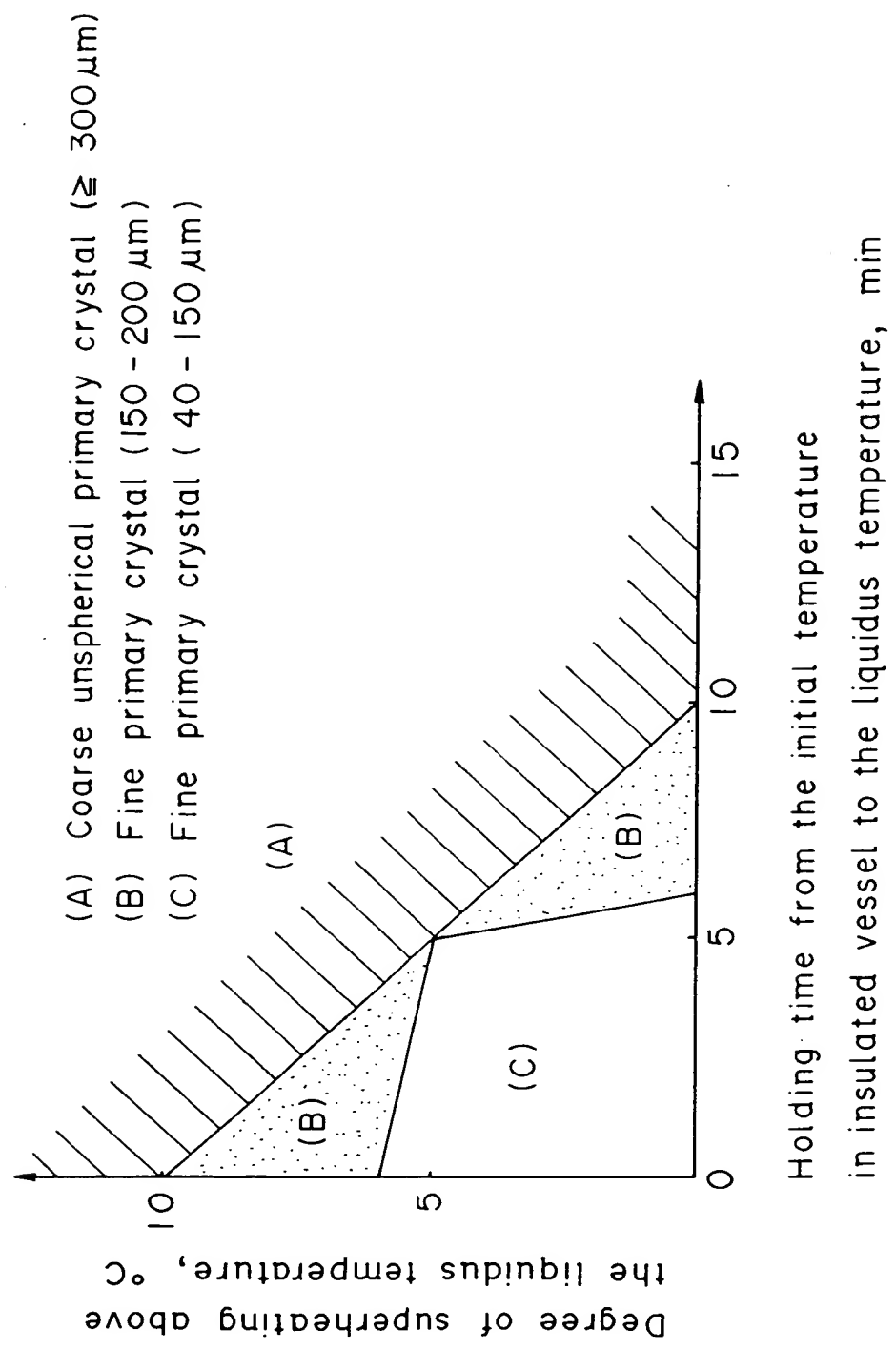
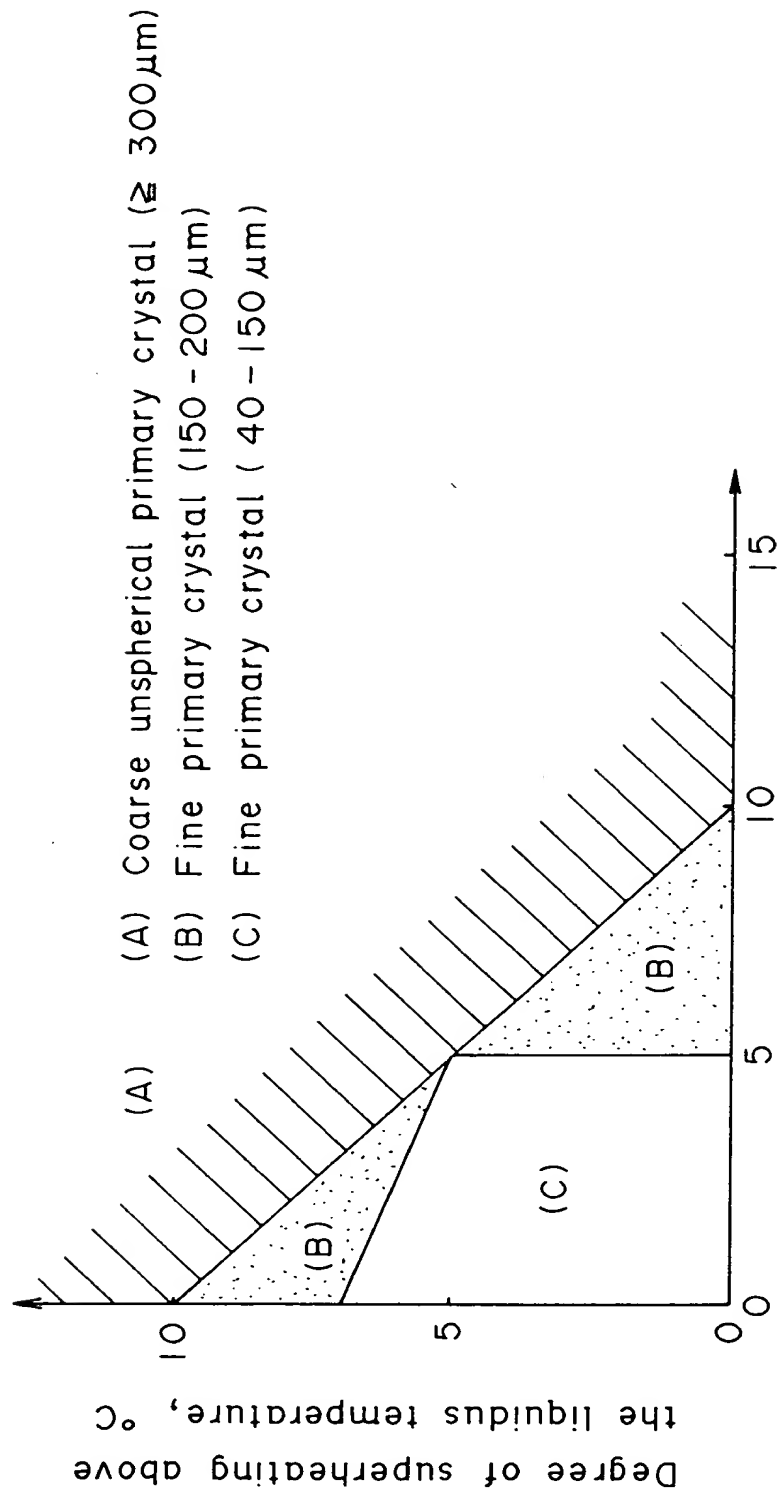
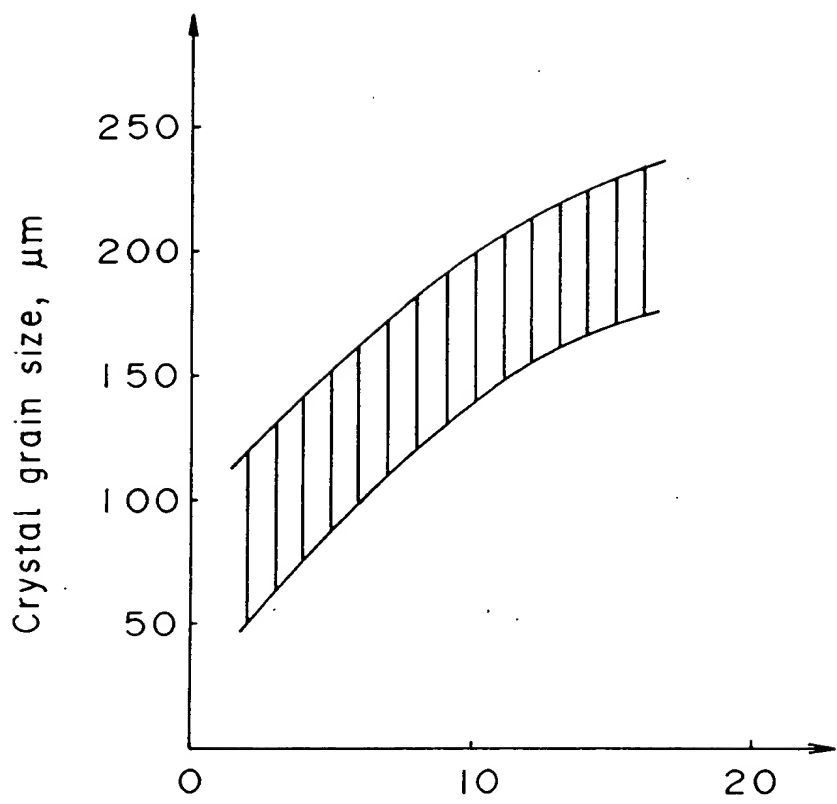


FIG. 18



Holding time from the initial temperature
in insulated vessel to the liquidus temperature, min

FIG. 19

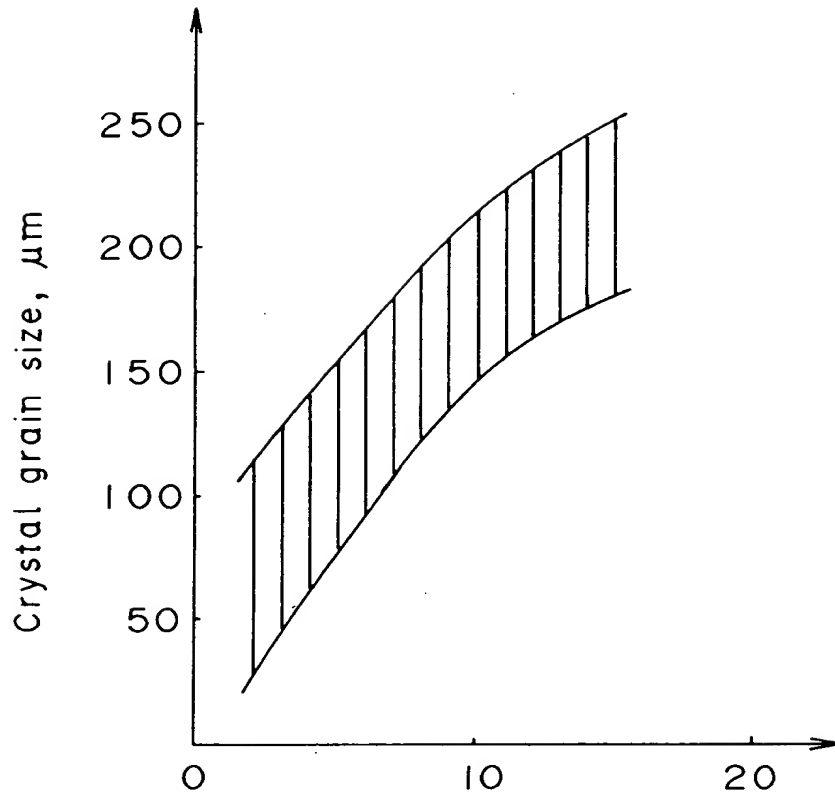


Holding time from the initial temperature
in insulated vessel to the liquidus
temperature minus 5°C, min

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

RR 672378

FIG. 20



Holding time from the initial temperature
in insulated vessel to the liquidus
temperature minus 5°C , min

FIG. 21

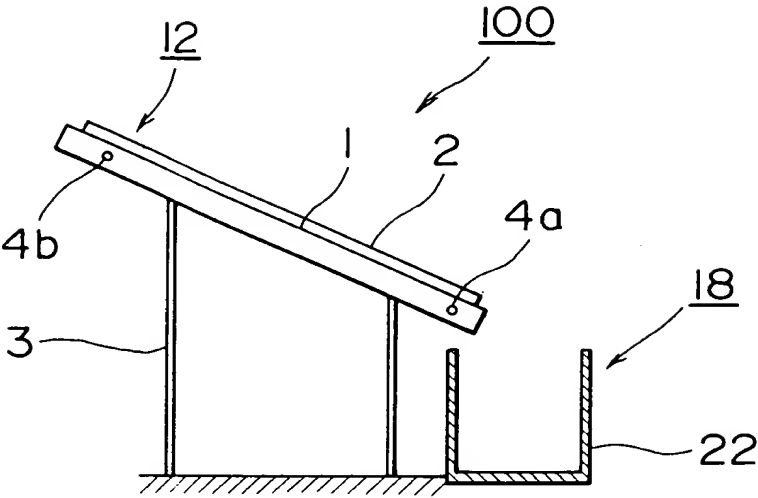


FIG. 22

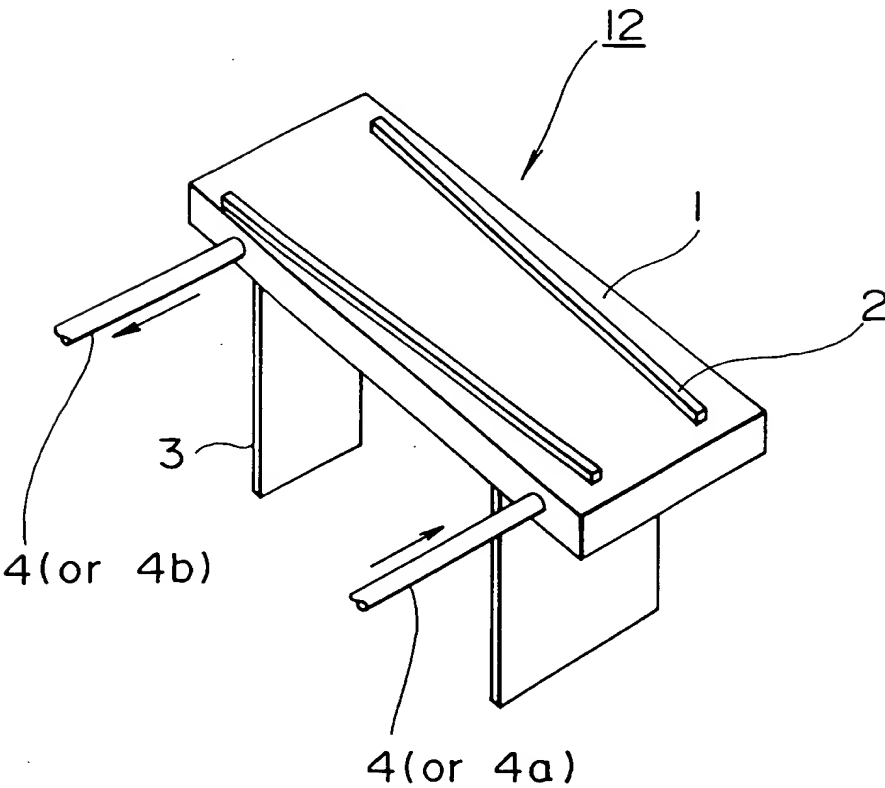


FIG. 23(a)

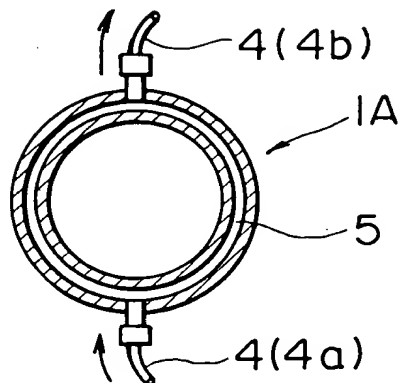


FIG. 23(b)

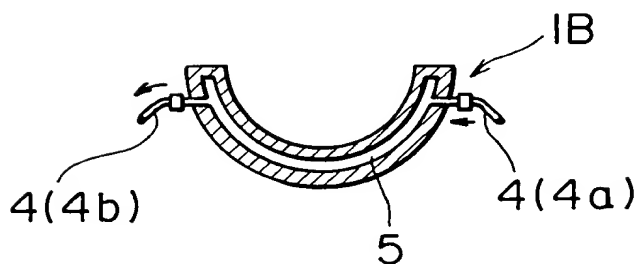


FIG. 24

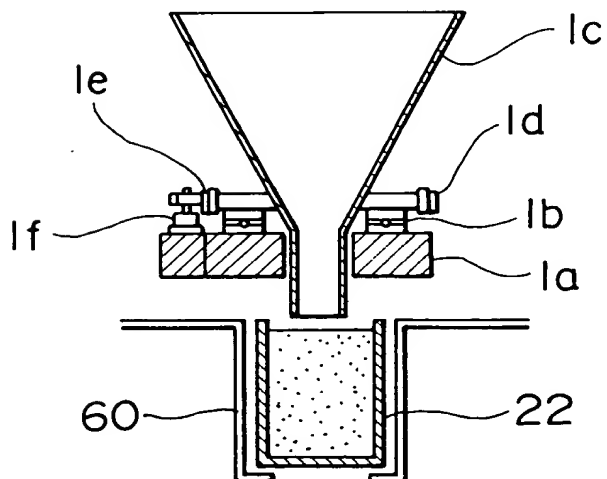


FIG. 25

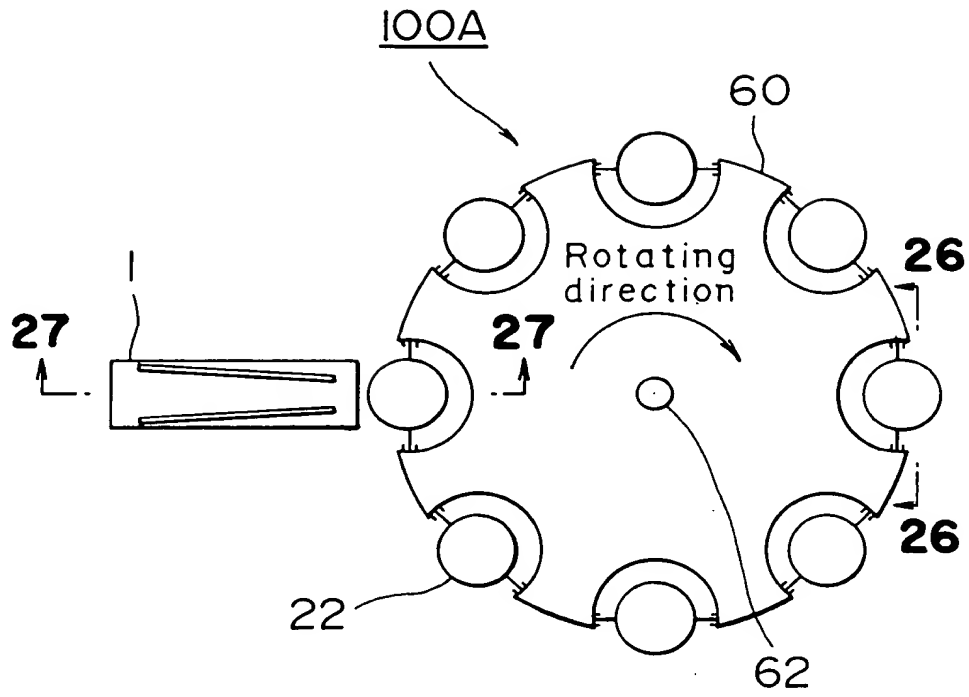


FIG. 26

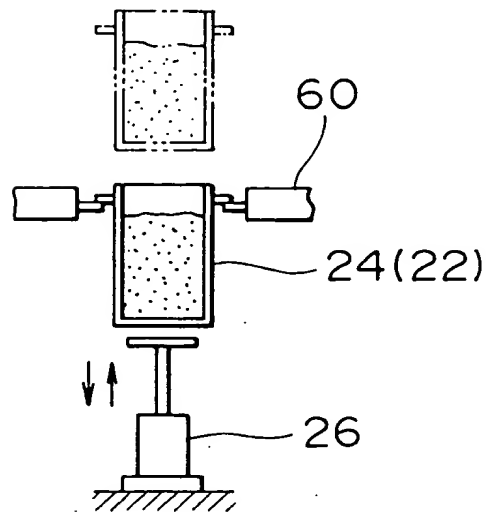


FIG. 27

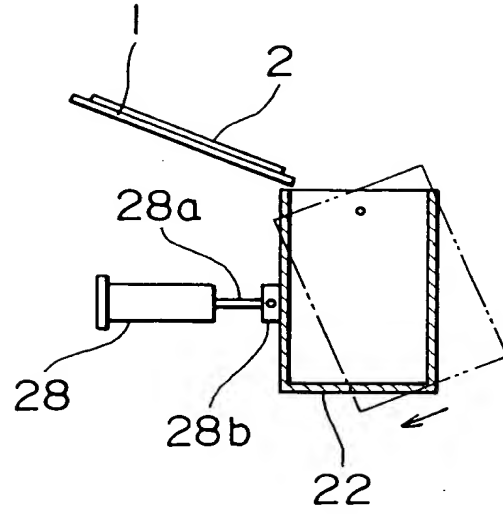


FIG. 28

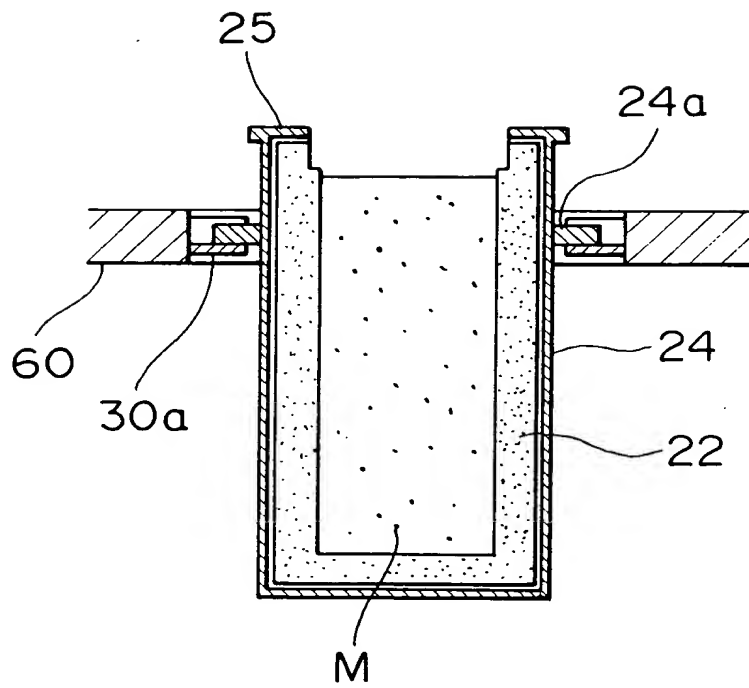


FIG. 29

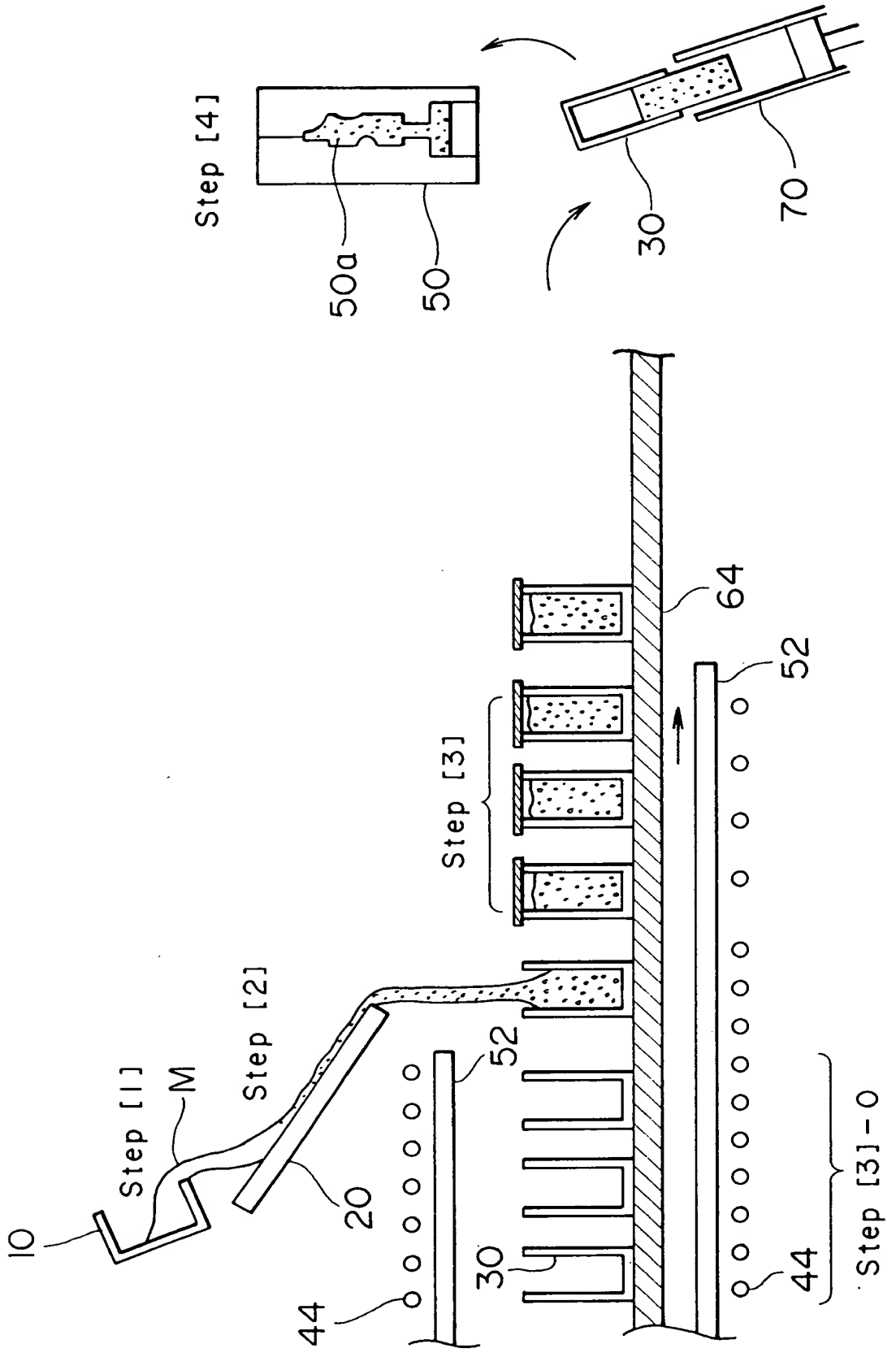


FIG. 30(a)

Left to cool at
both top and bottom

5mm-thick stainless steel vessel

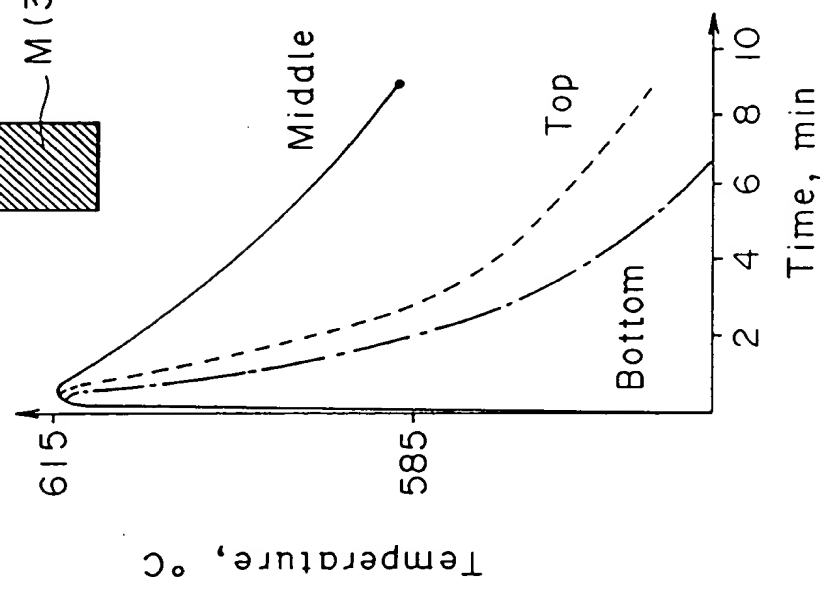
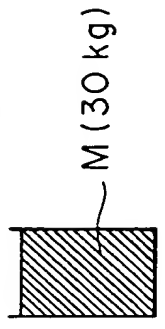


FIG. 30(b)

Heat-retained at top
but heated at bottom

Ceramic cover

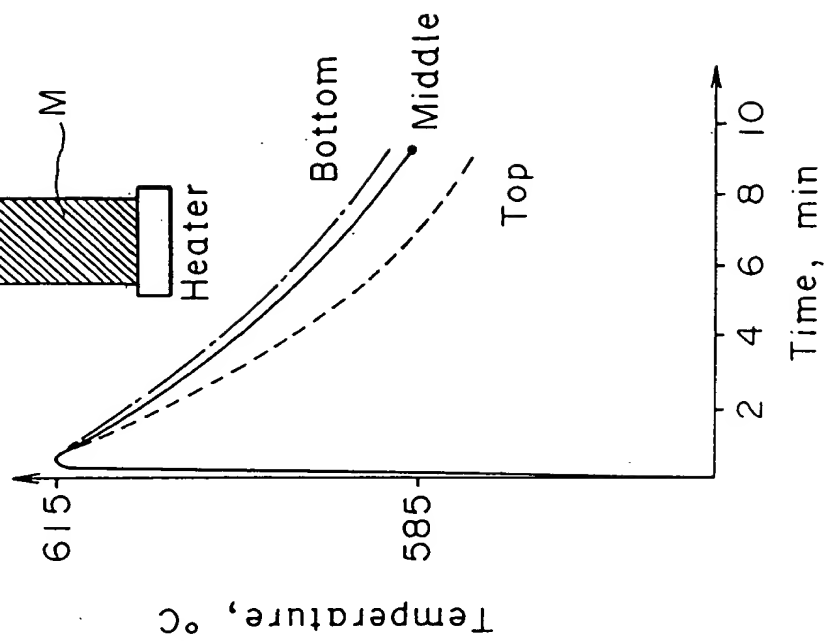
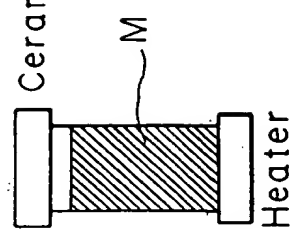
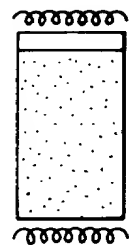


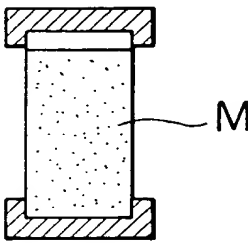
FIG. 3I(a) FIG. 3I(b)

Heated



Heated

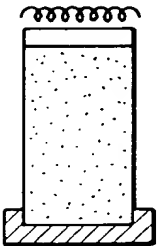
Heat-retained



Heat-retained

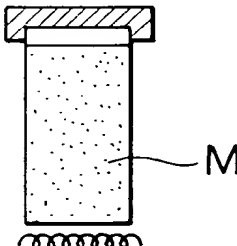
FIG. 3I(c) FIG. 3I(d)

Heated



Heat-retained

Heat-retained



Heated

FIG. 32

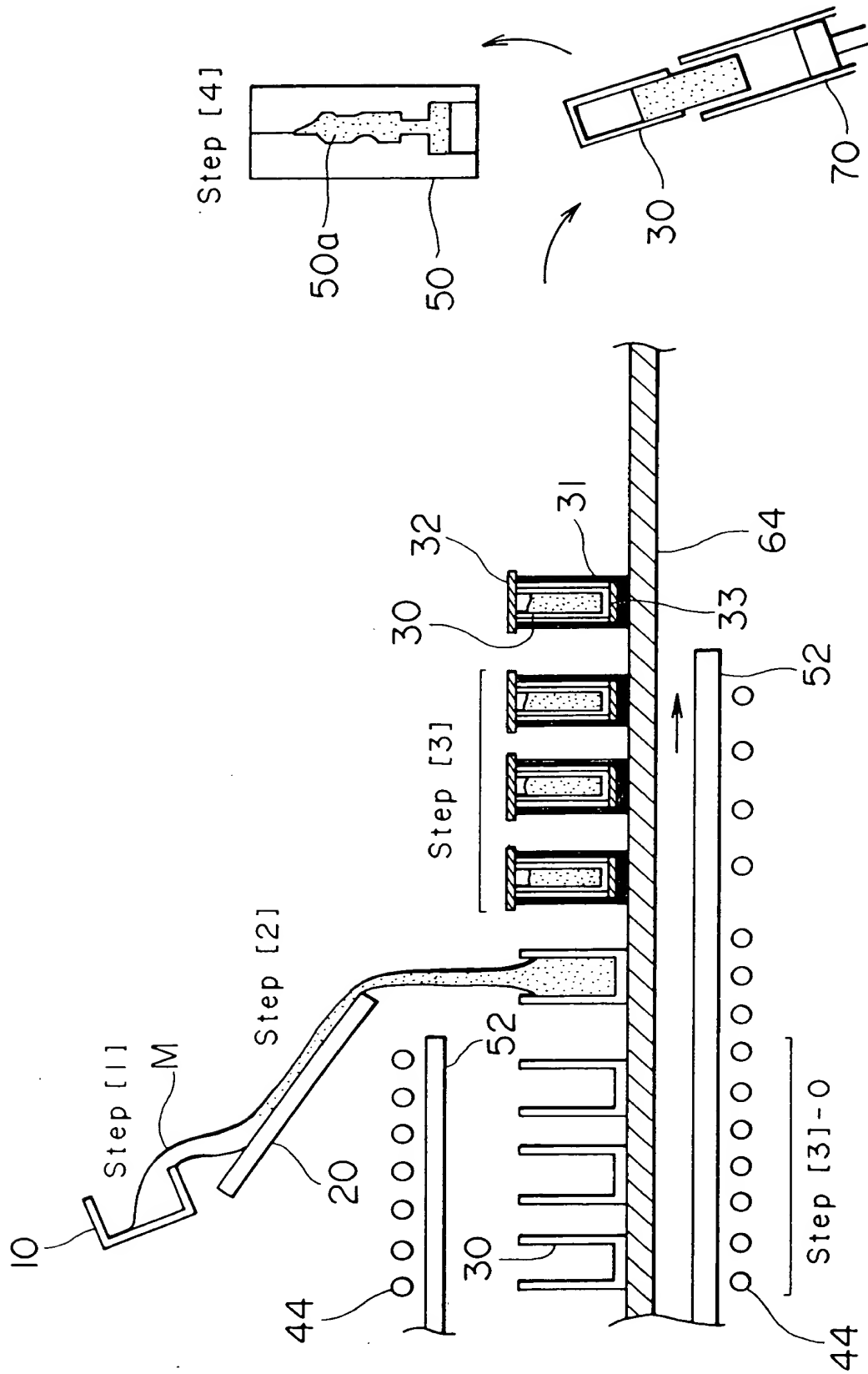


FIG. 33(a)

[Comparative]



Holding vessel
(stainless steel)

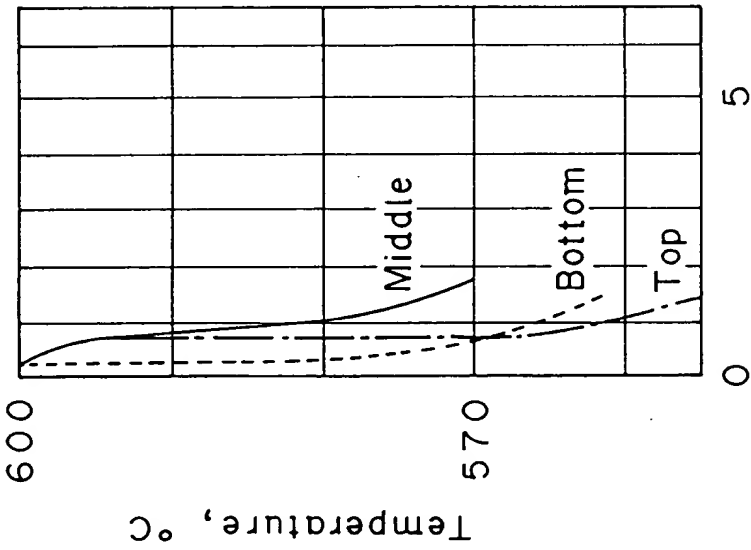
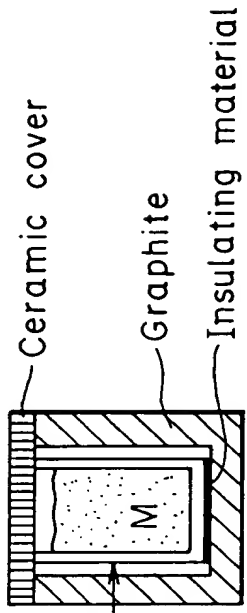


FIG. 33(b)

[Invention]



Ceramic cover
Graphite
Insulating material

Holding vessel
(stainless steel)

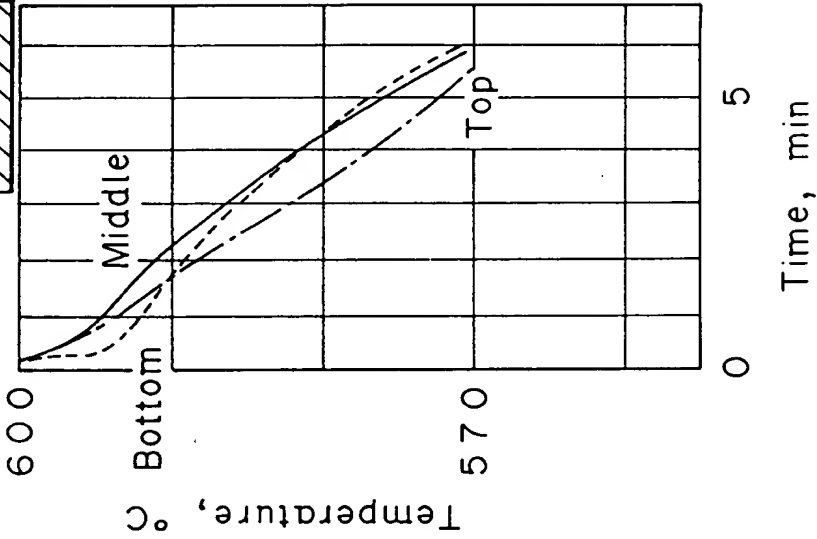
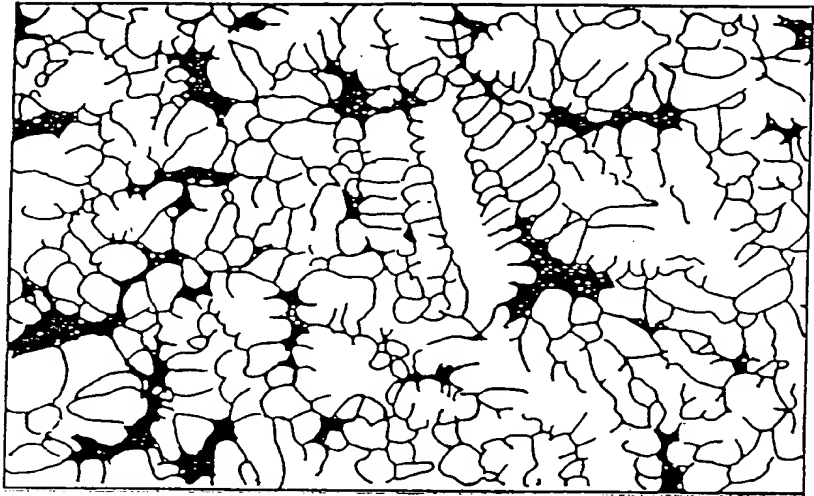
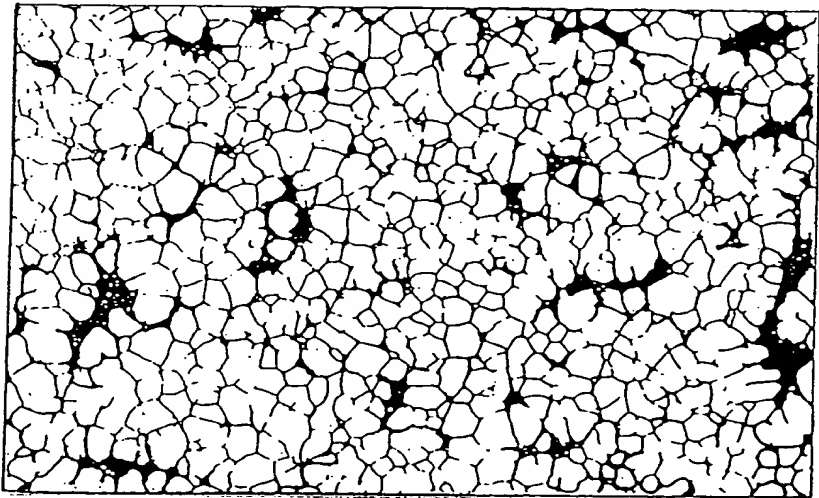


FIG. 34 Prior Art



200 μ m

FIG. 35



200 μ m

FIG. 36

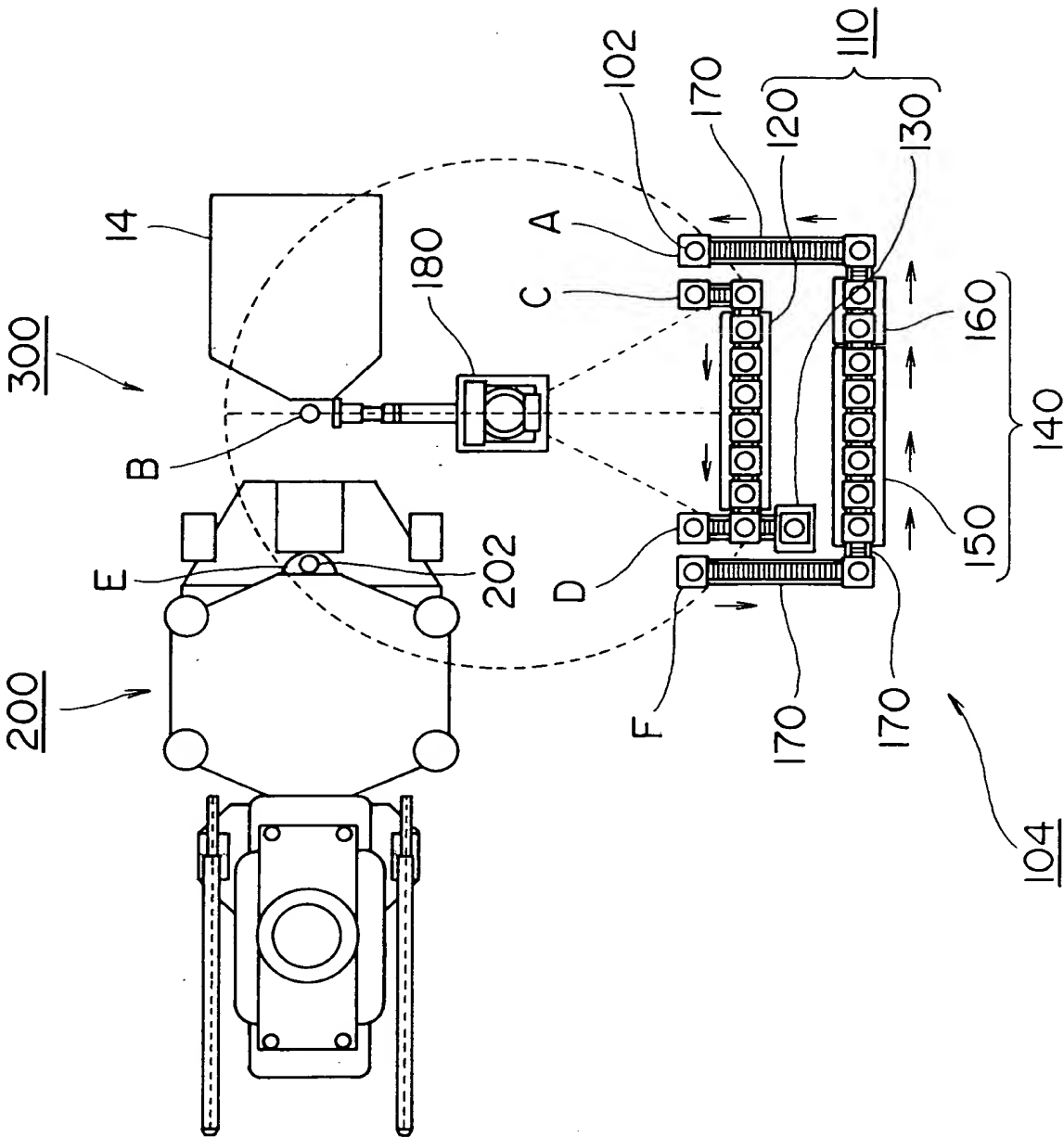


FIG. 37

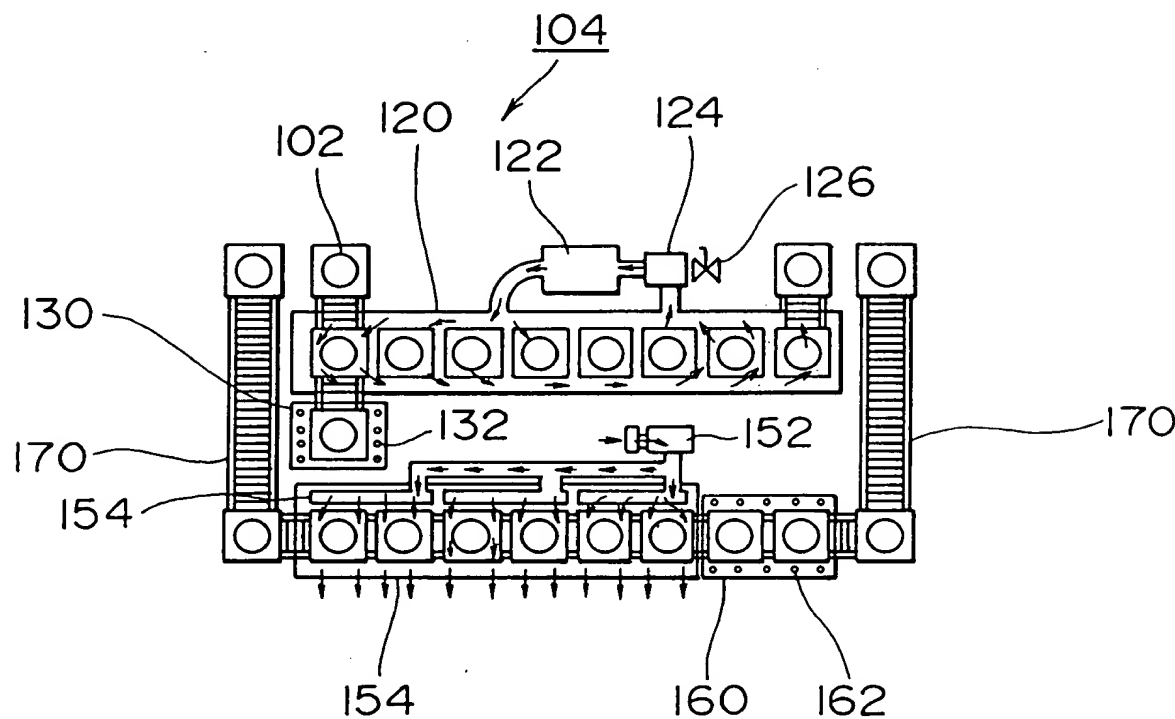


FIG. 38

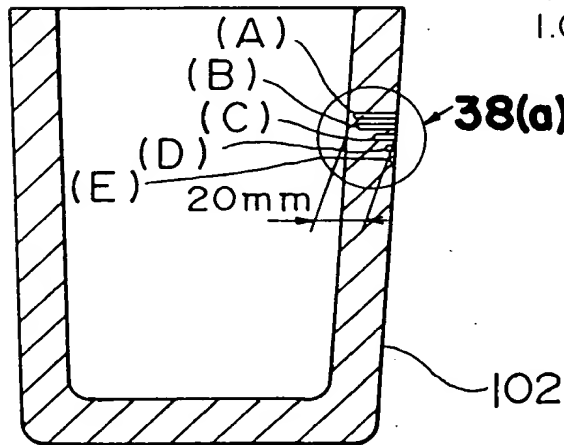


FIG. 38(a)

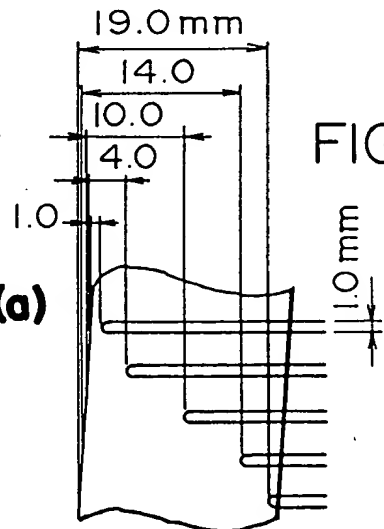


FIG. 39

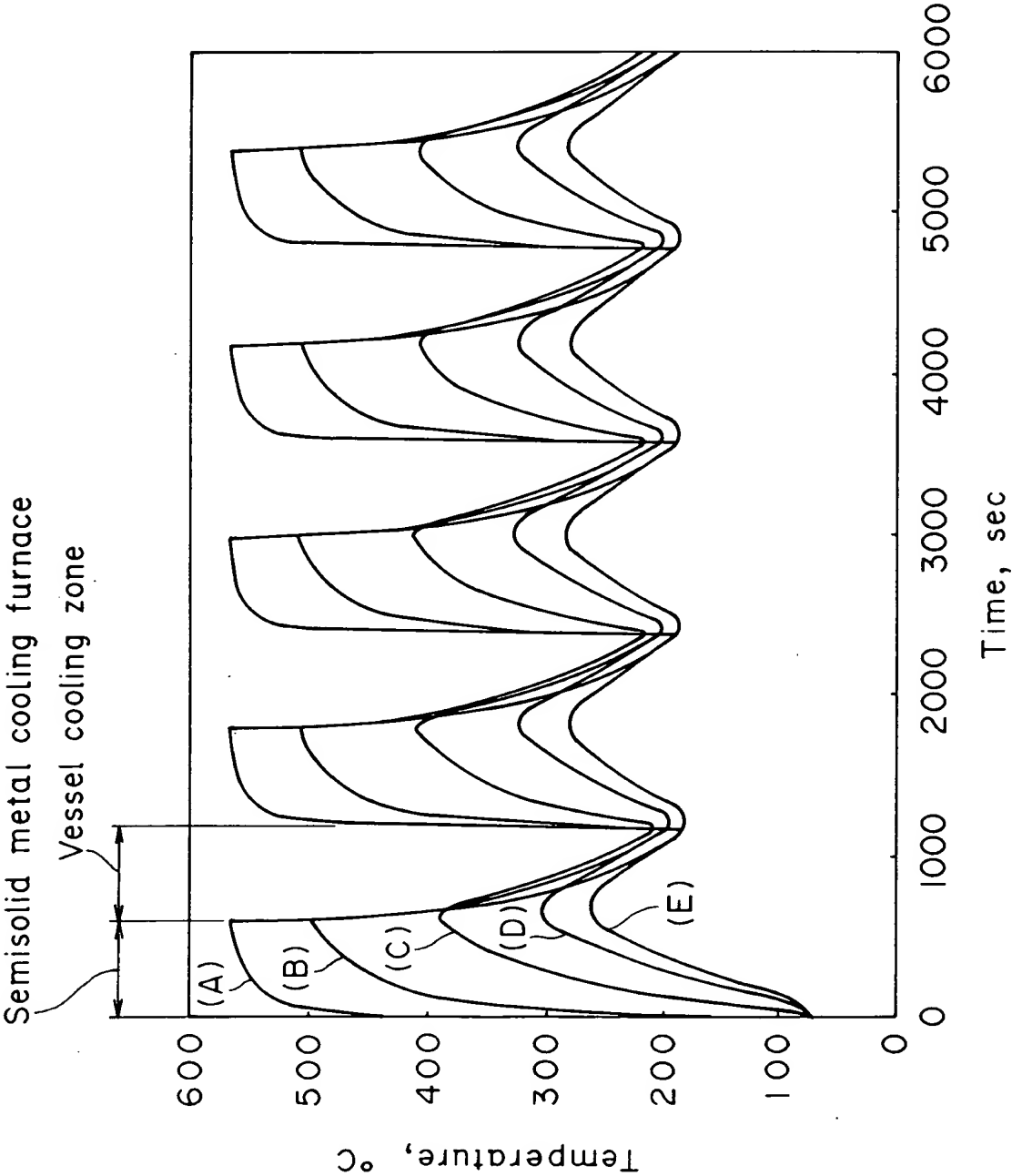


FIG. 40

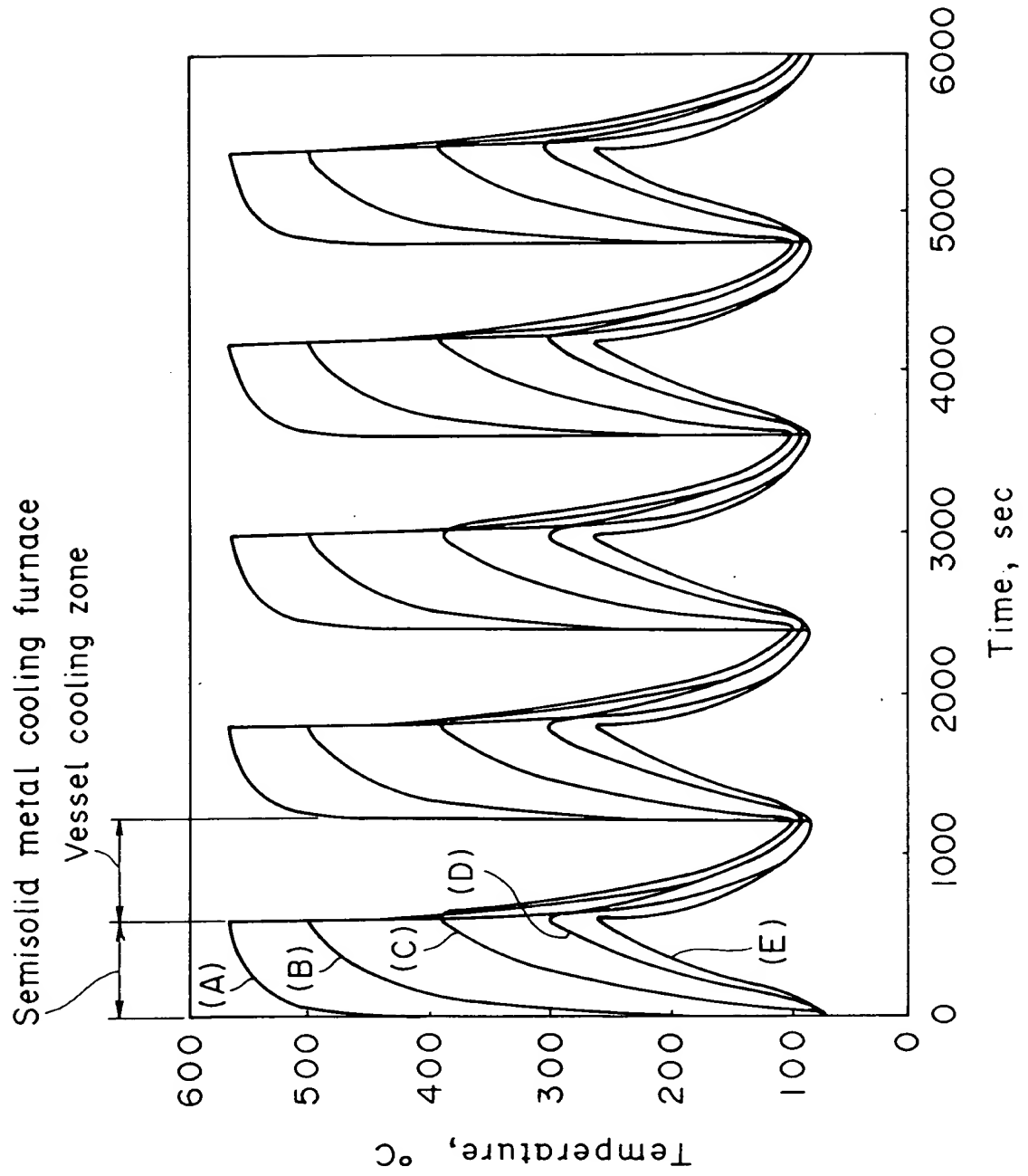


FIG. 4I

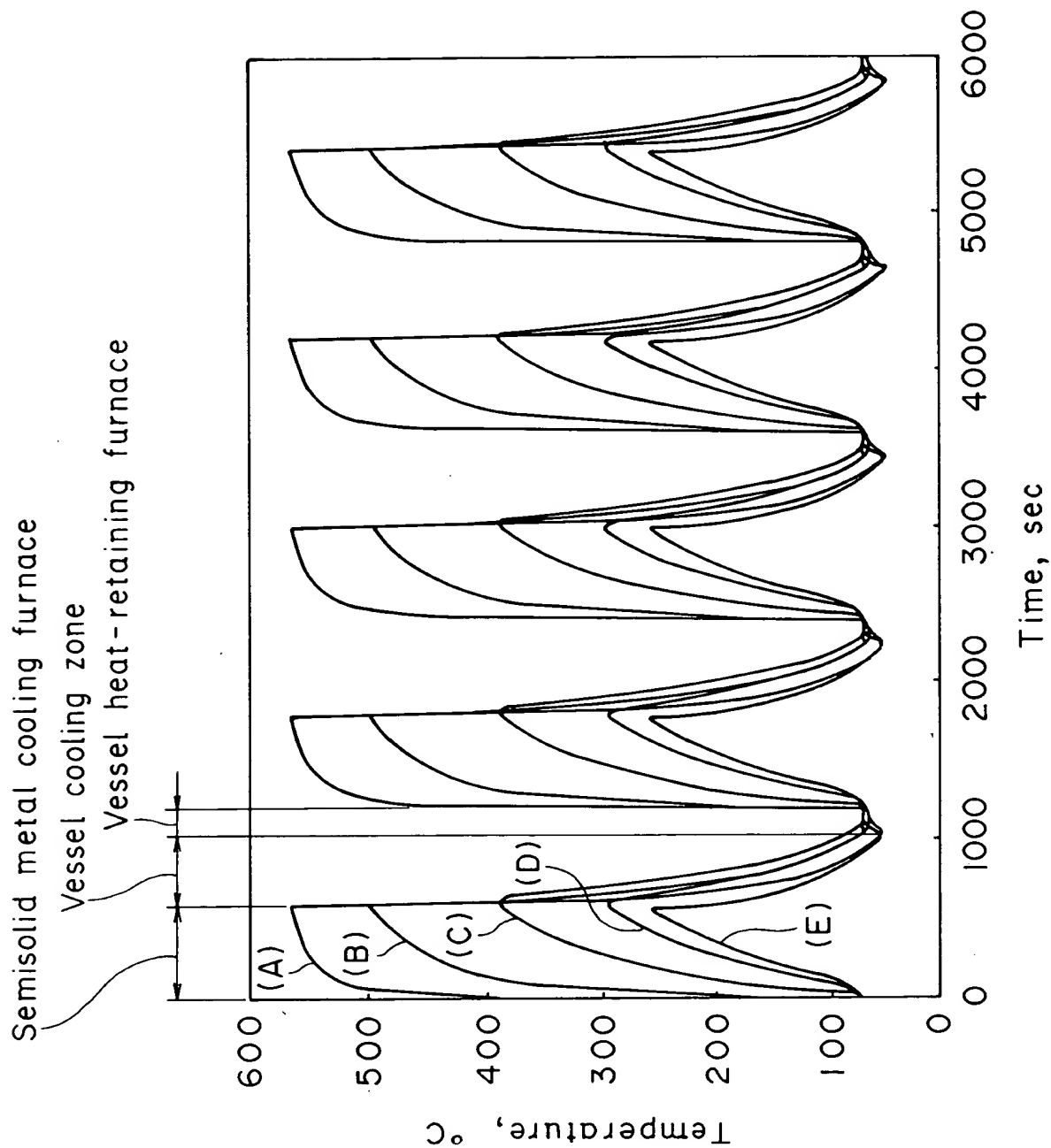


FIG. 42

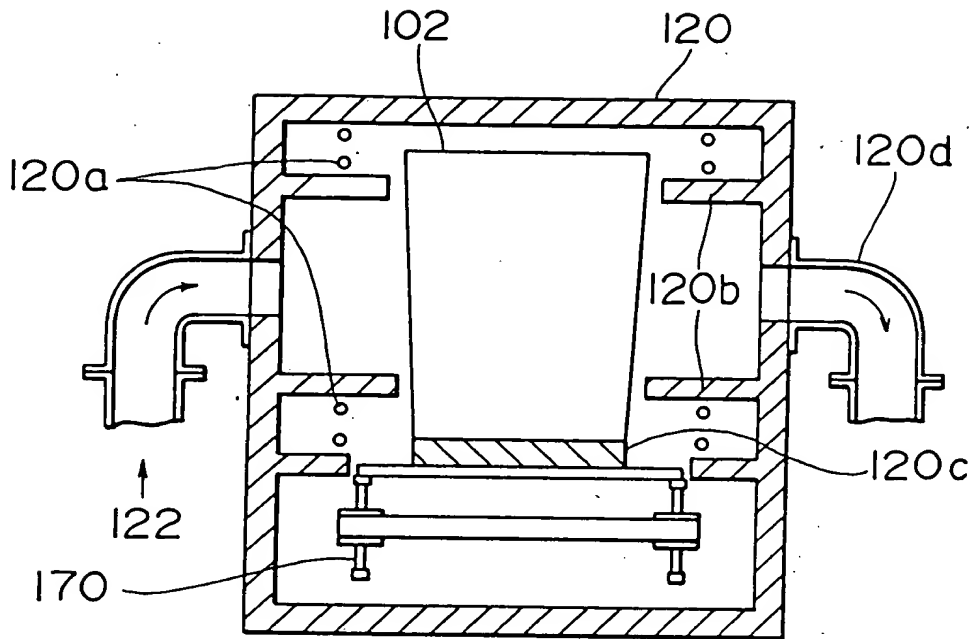


FIG. 43

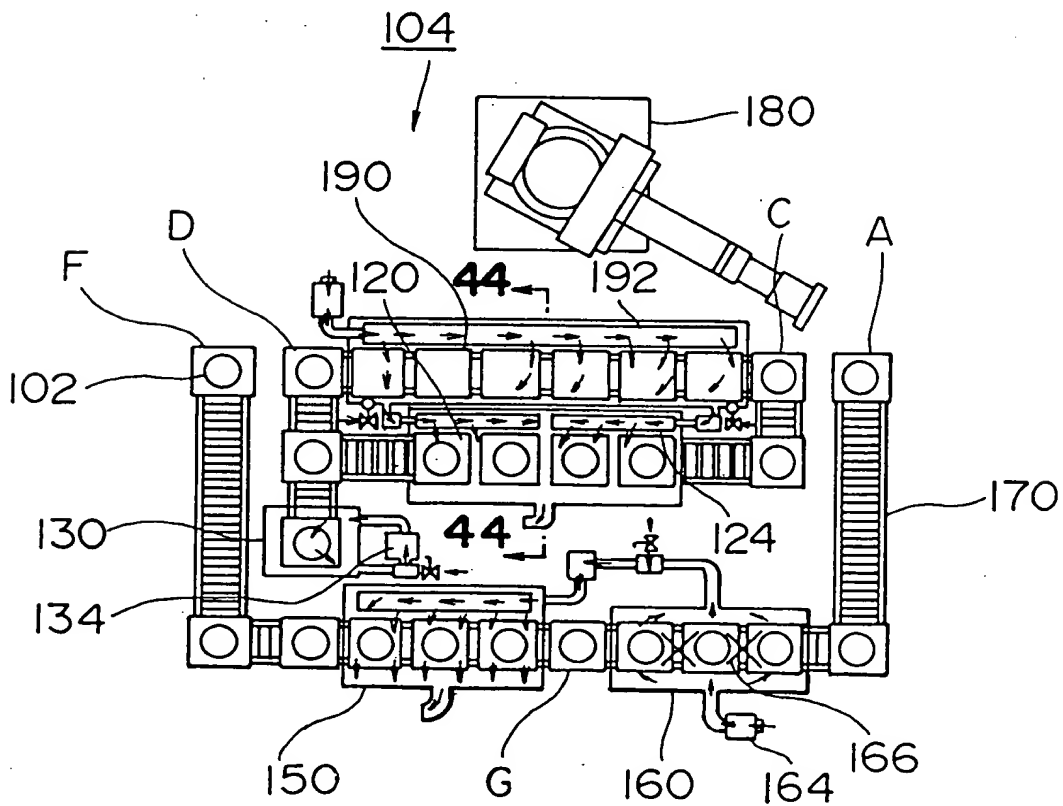


FIG. 44

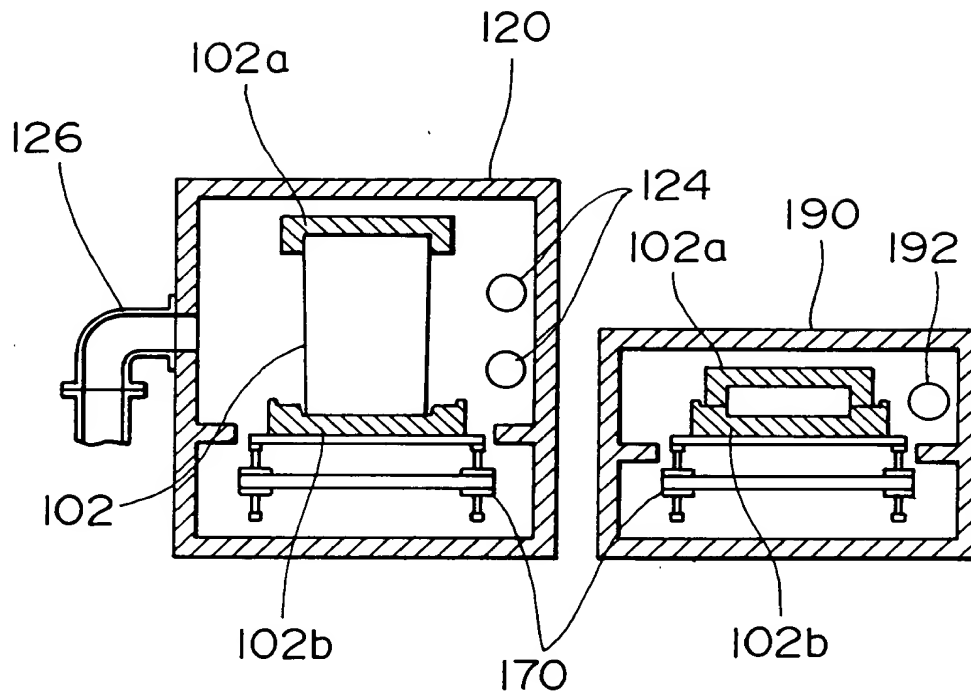


FIG. 45(a)

Temperature of atmosphere : 200°C

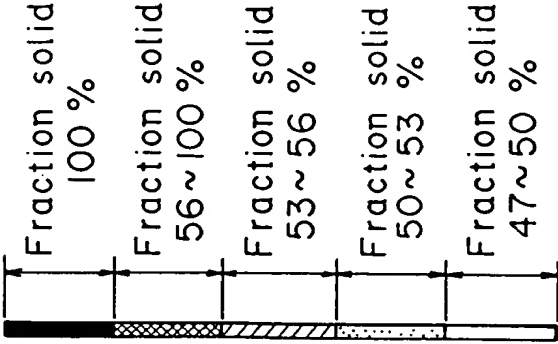


FIG. 45(b)

SUS304
preheated to 200°C

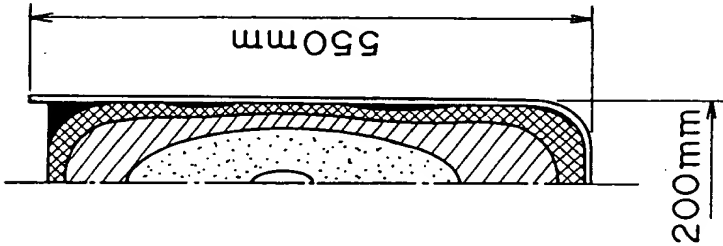


FIG. 45(c)

Al₂O₃-SiO₂ composite
preheated to 200°C

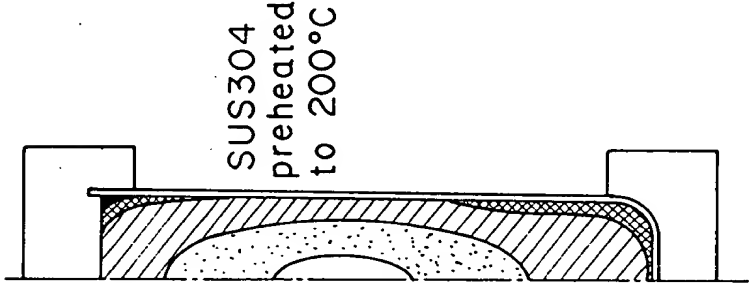
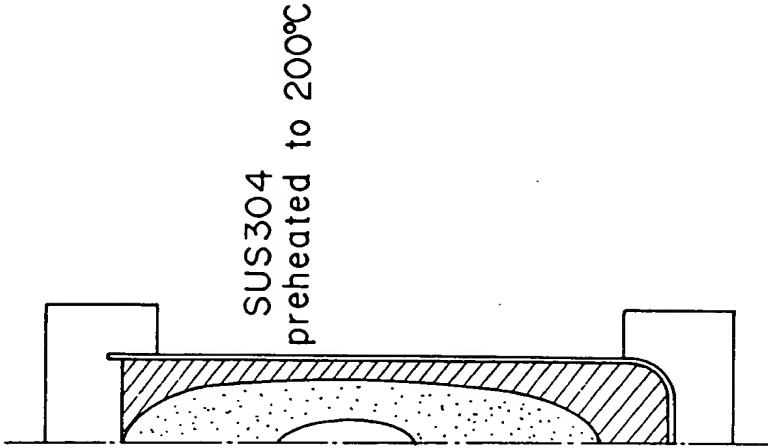


FIG. 45(d)

Al₂O₃-SiO₂ composite
preheated to 350°C



Al₂O₃-SiO₂ composite
preheated to 200°C

Al₂O₃-SiO₂ composite
preheated to 350°C

FIG. 46

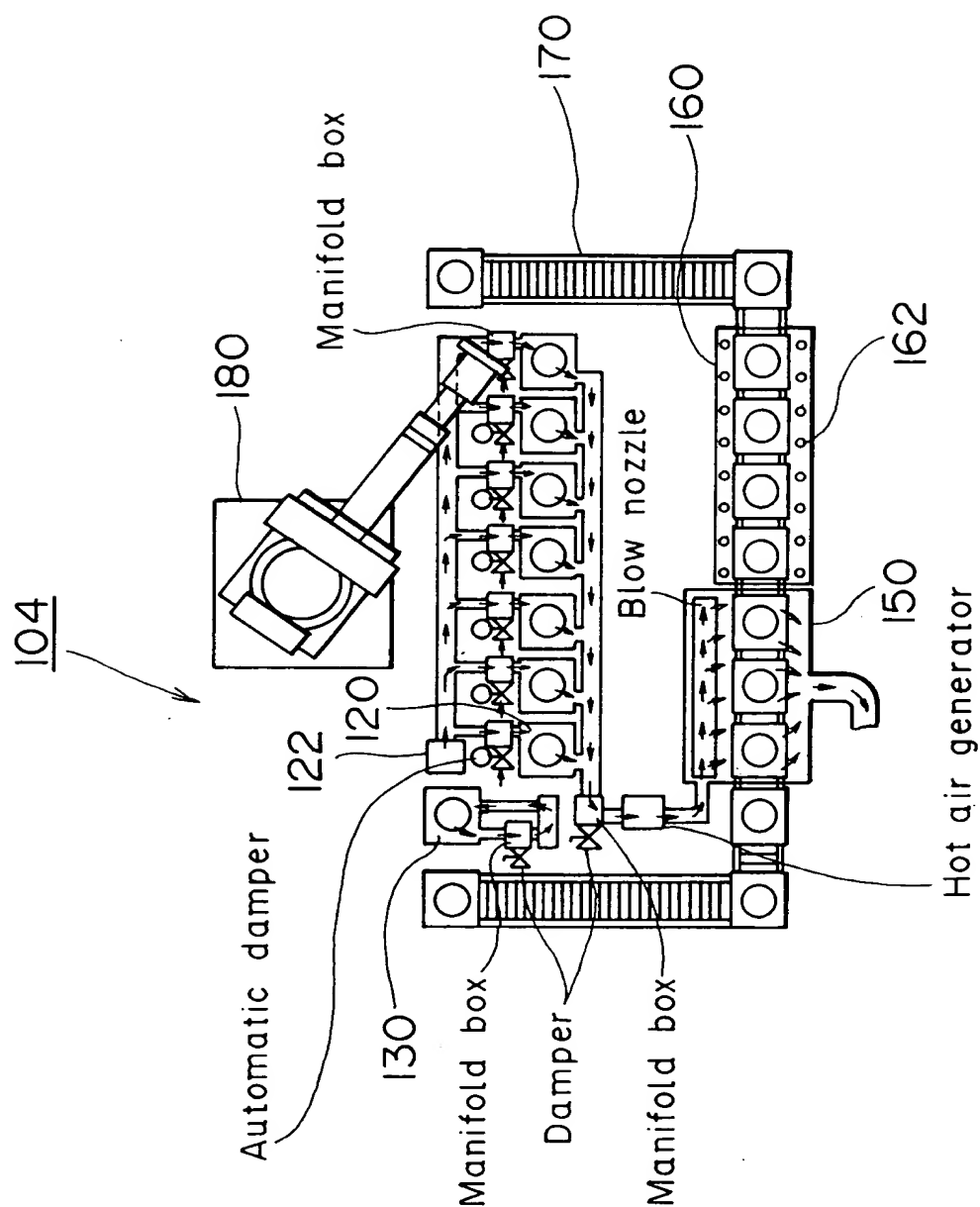


FIG. 47

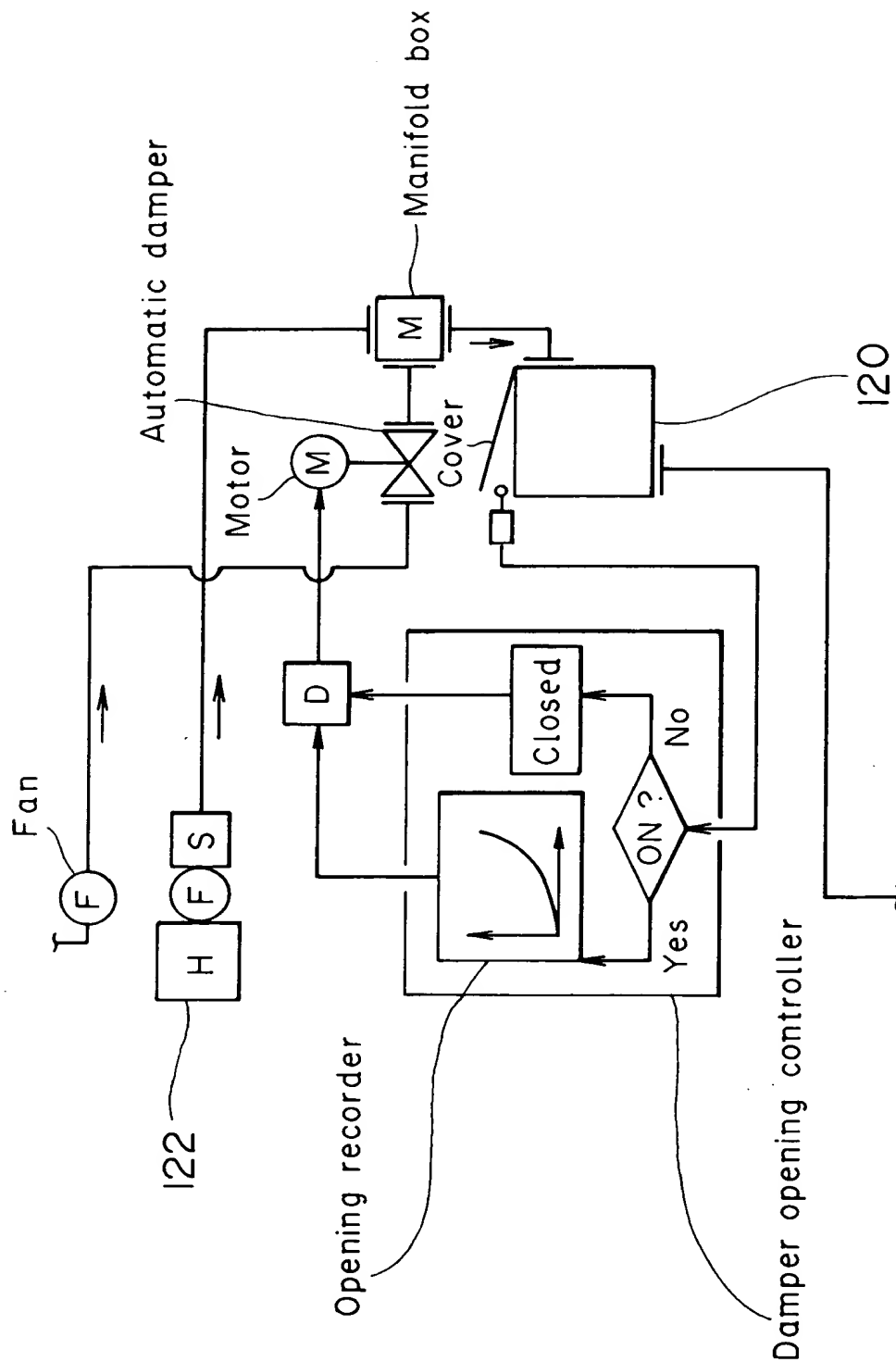


FIG. 48

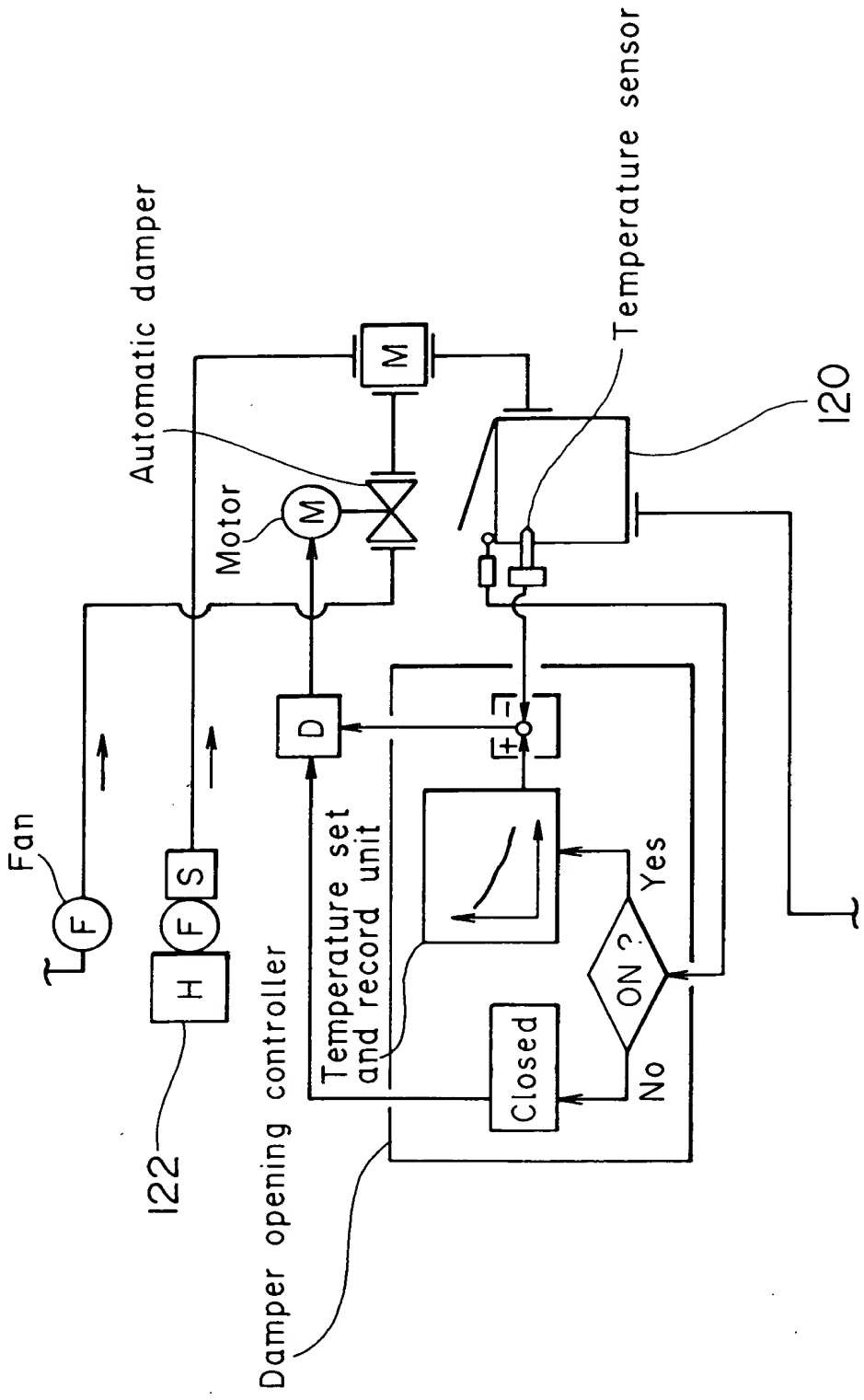


FIG. 49

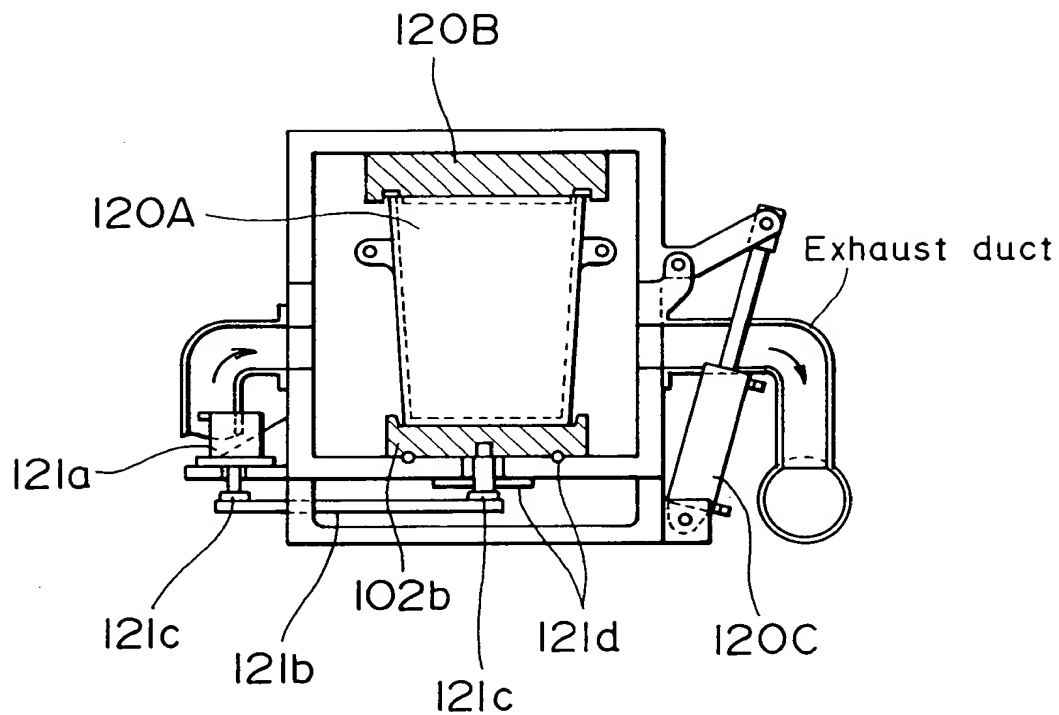
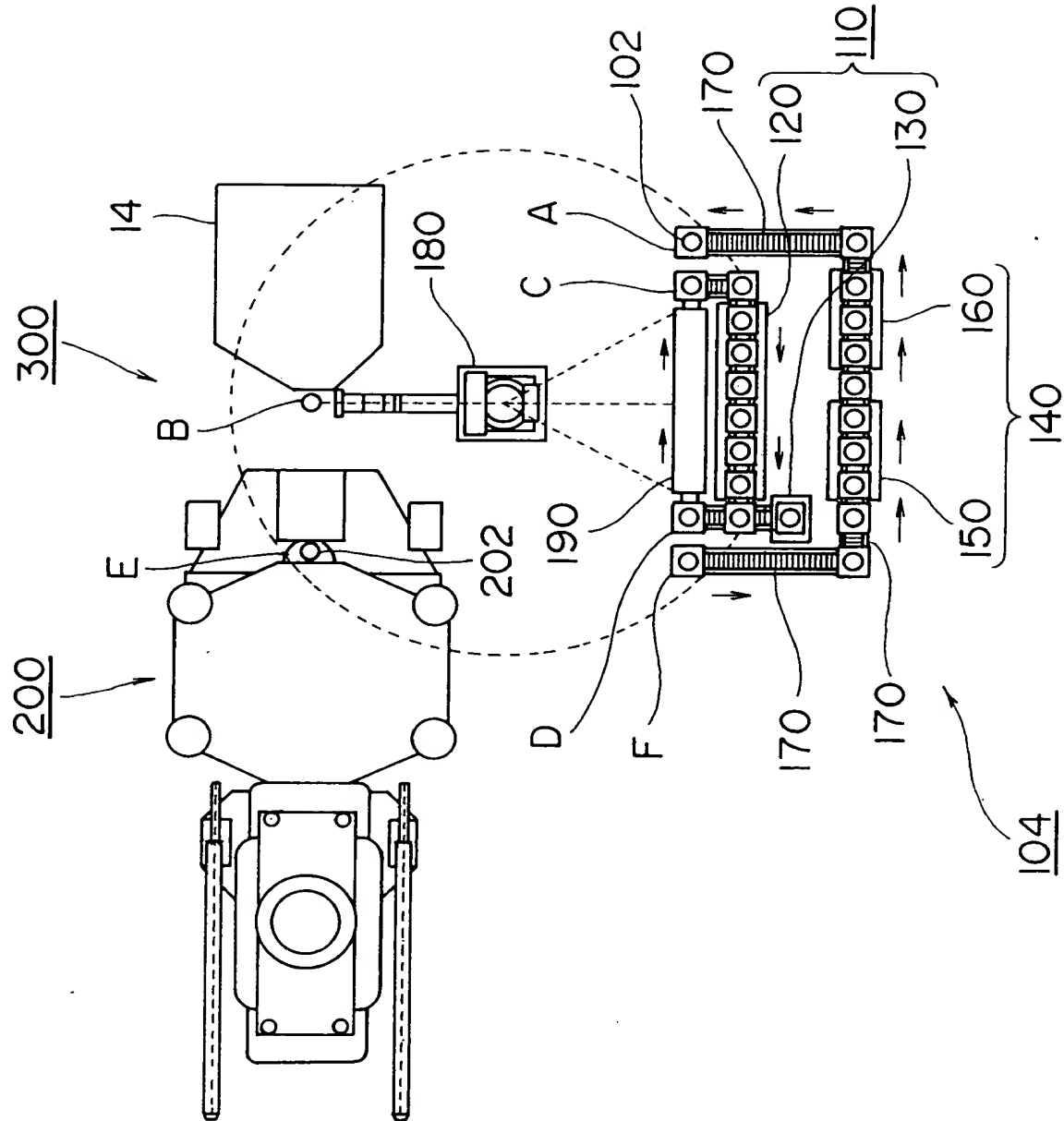


FIG. 50



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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FIG. 5I

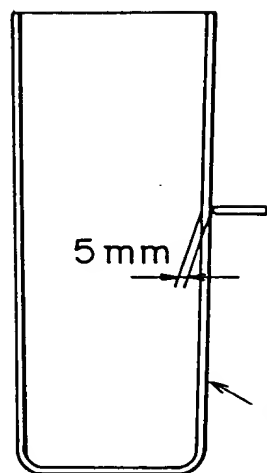
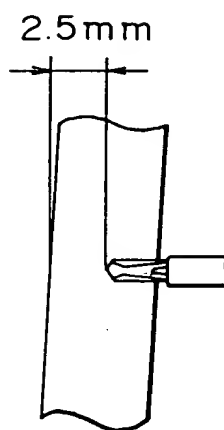


FIG. 5I(a)



SUS304

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

NR 672378

FIG. 52

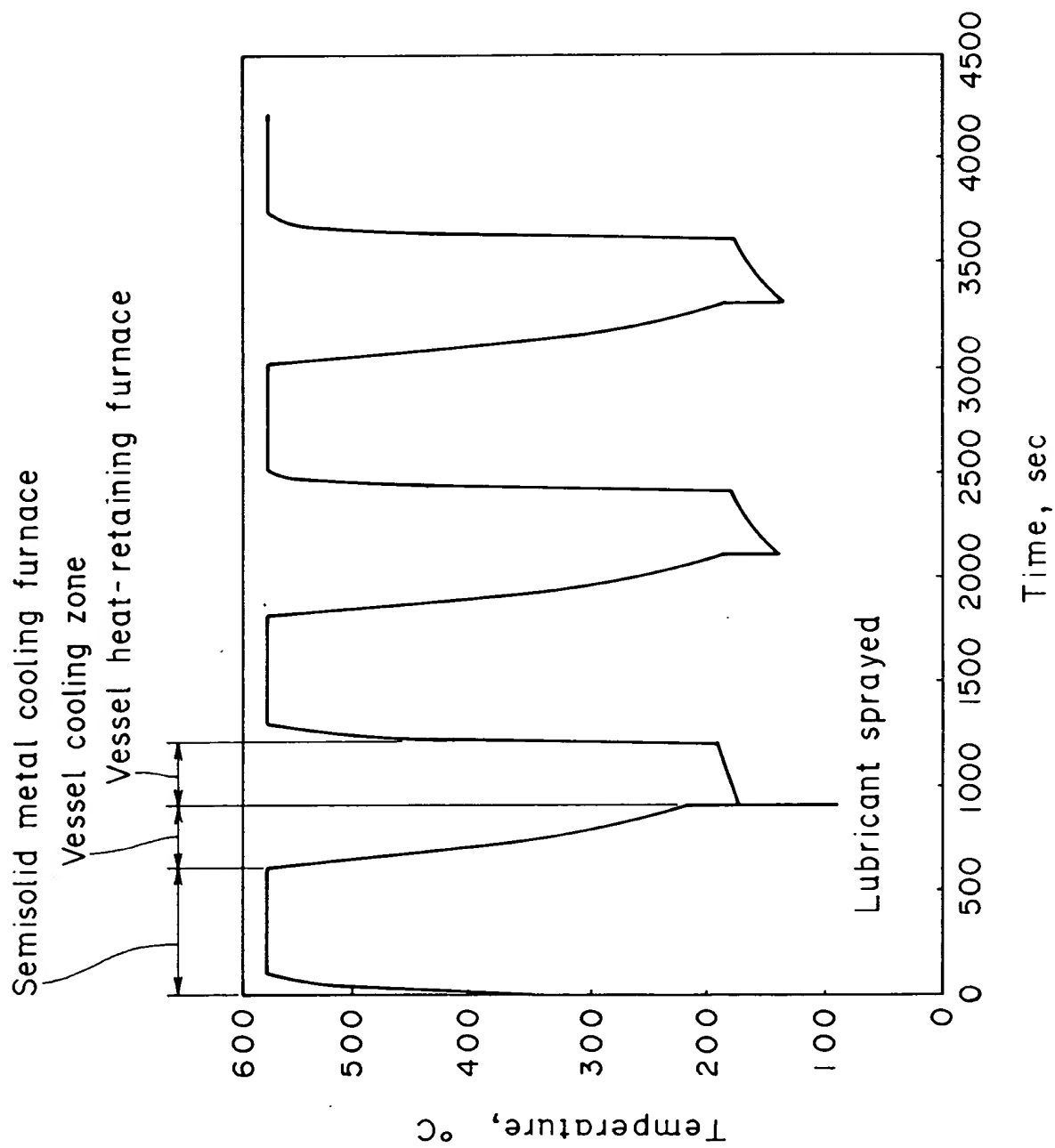


FIG. 53

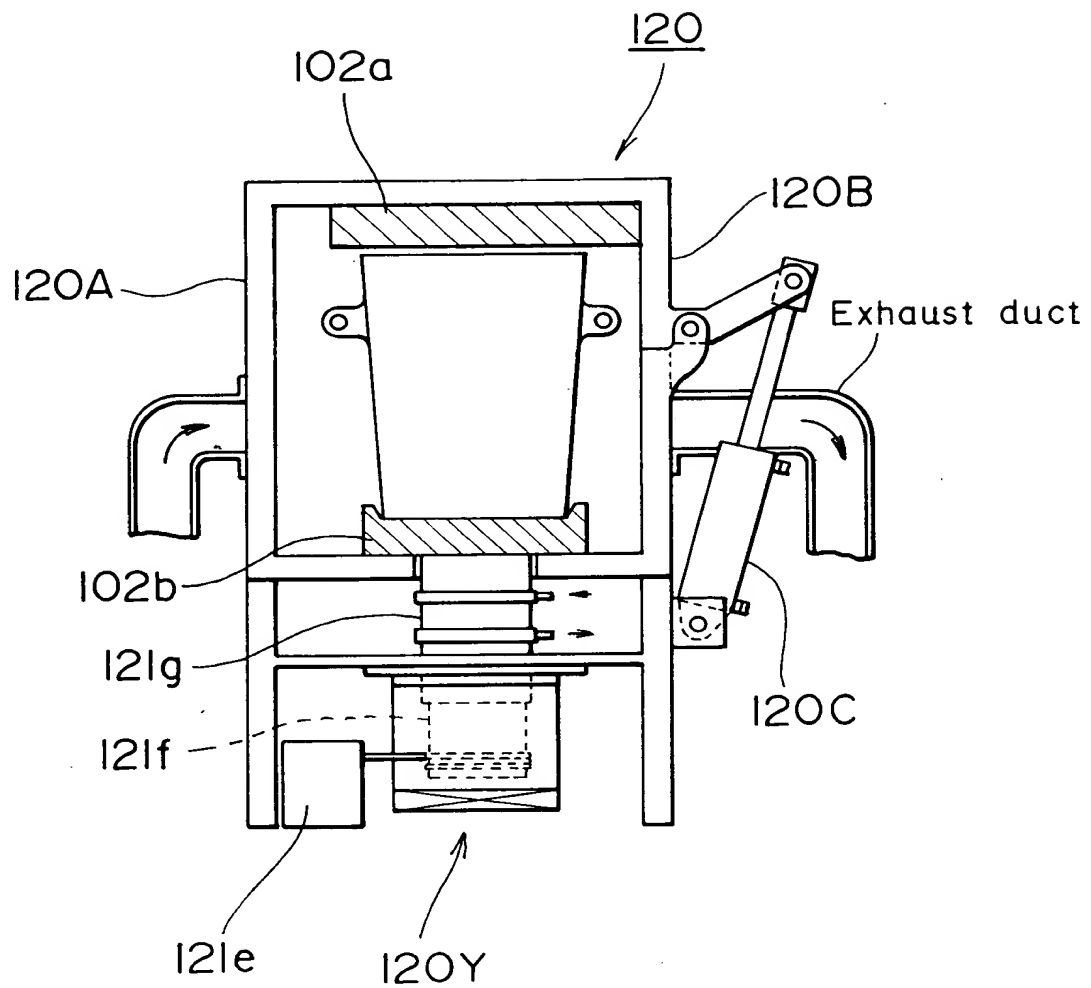


FIG. 54

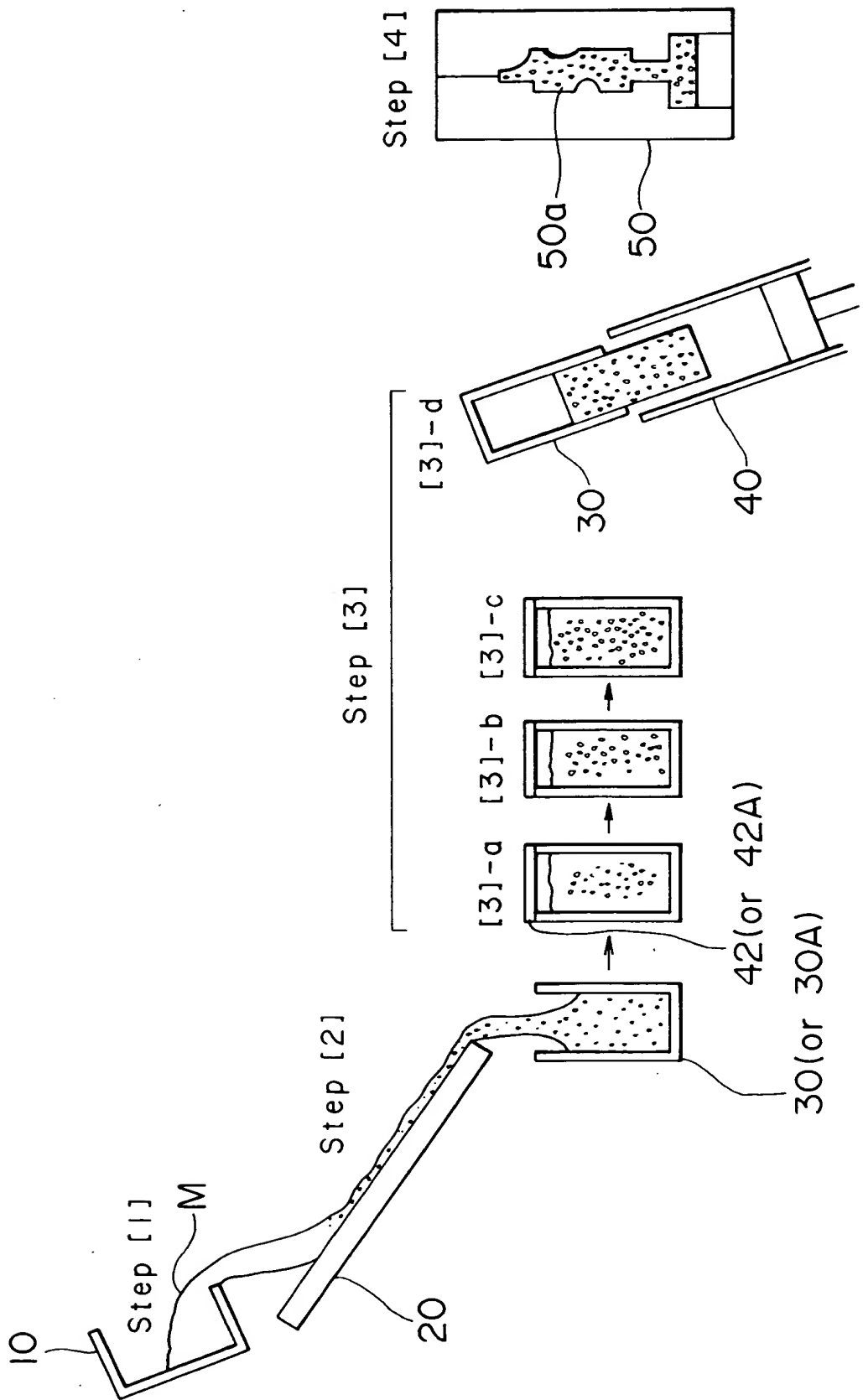
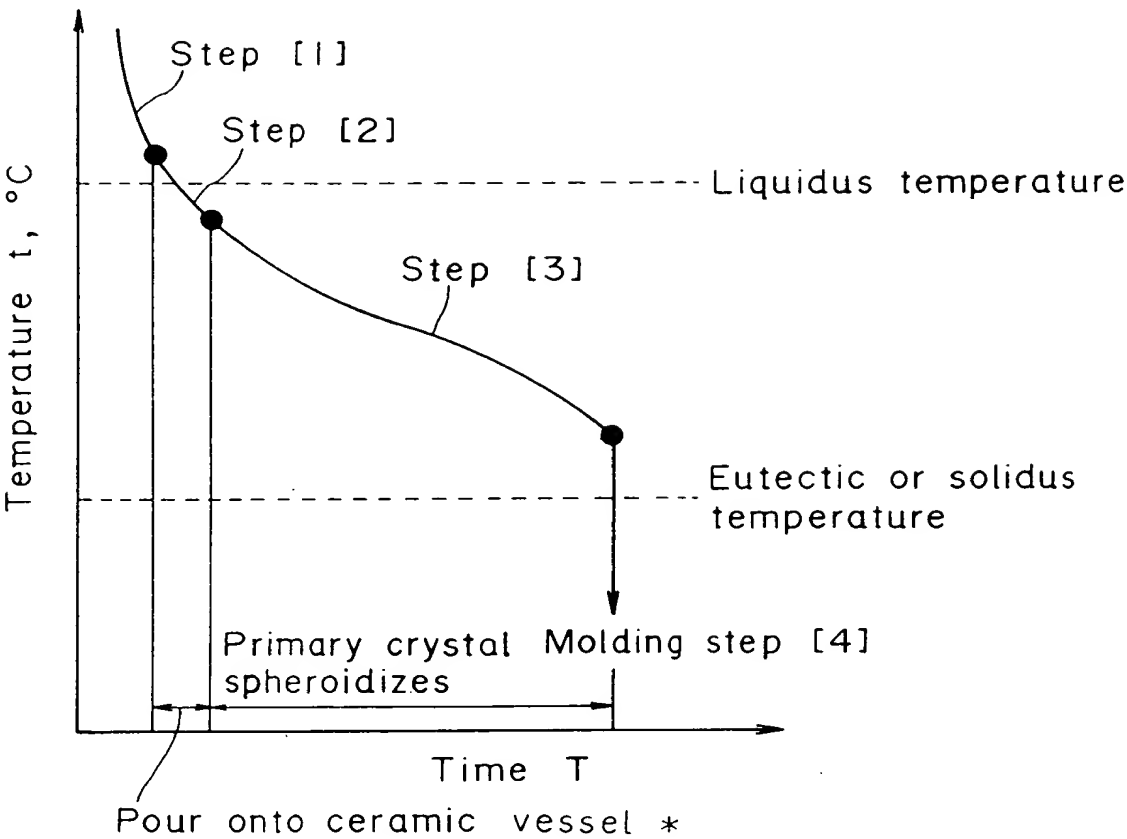


FIG. 55



* With or without cooling jig

FIG. 56

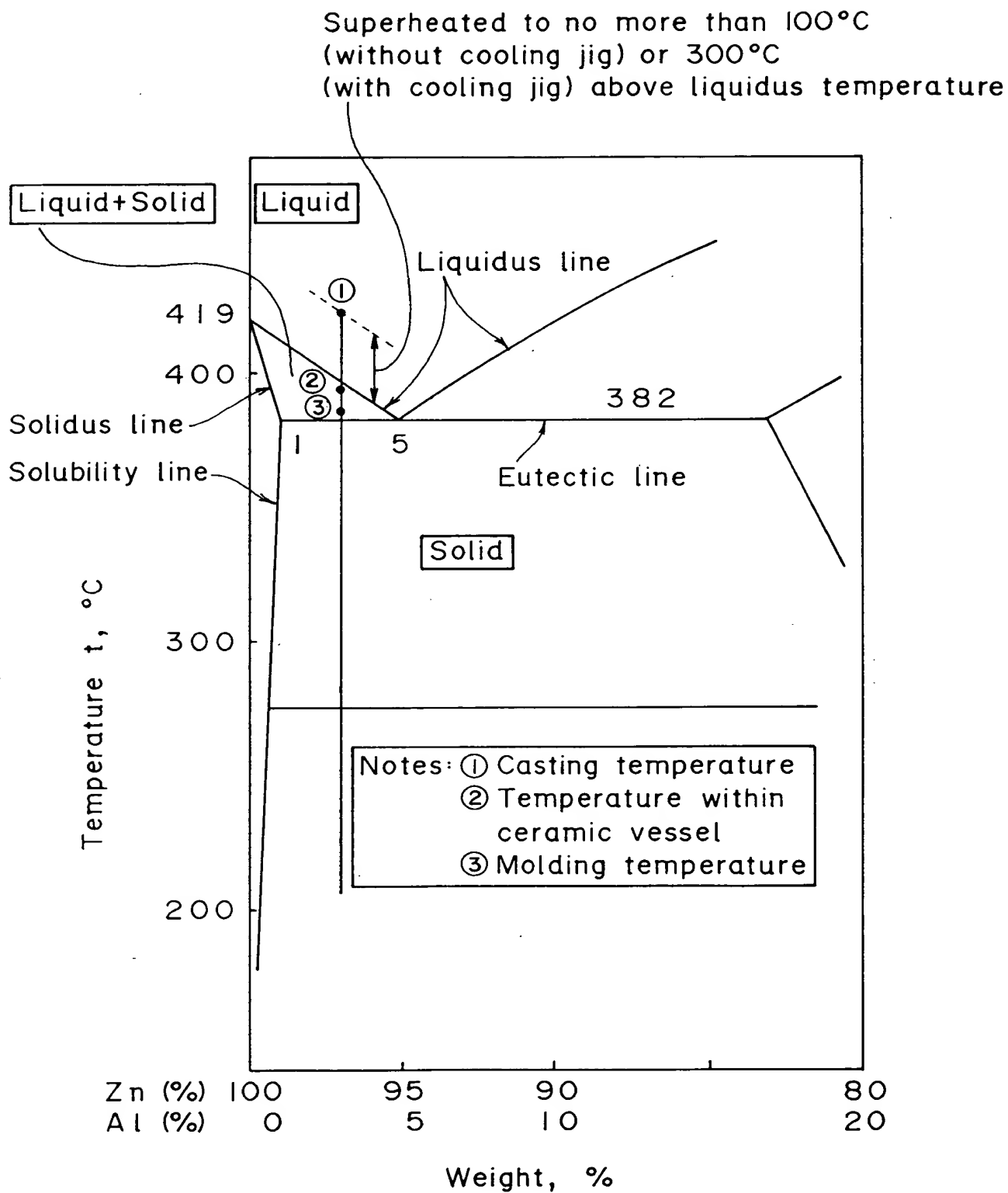


FIG. 57

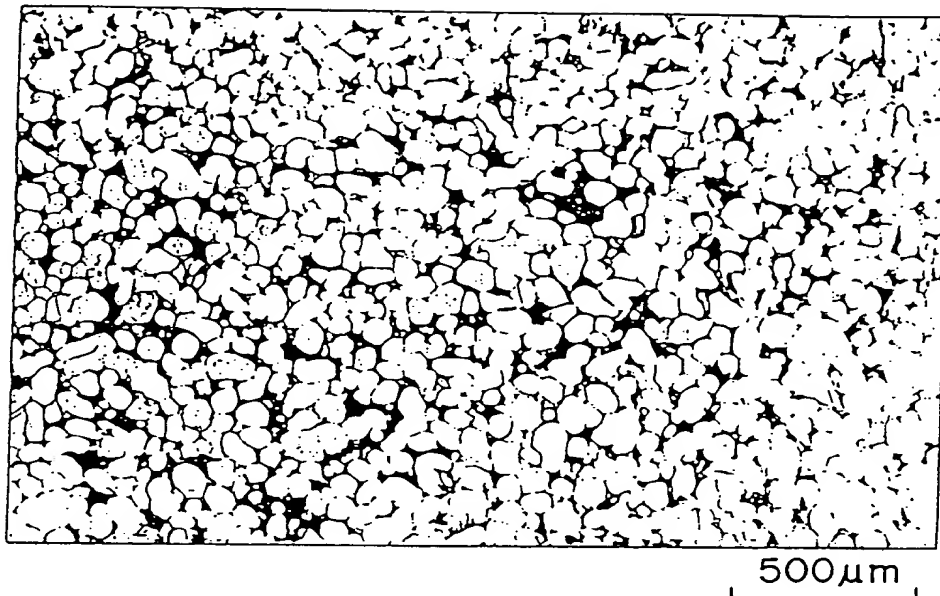


FIG. 58 Prior Art

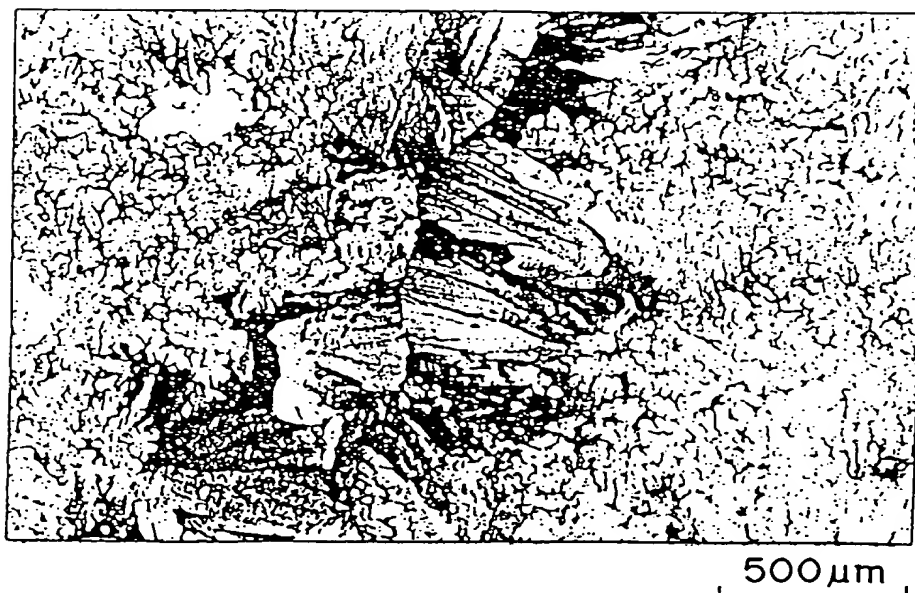


FIG. 59

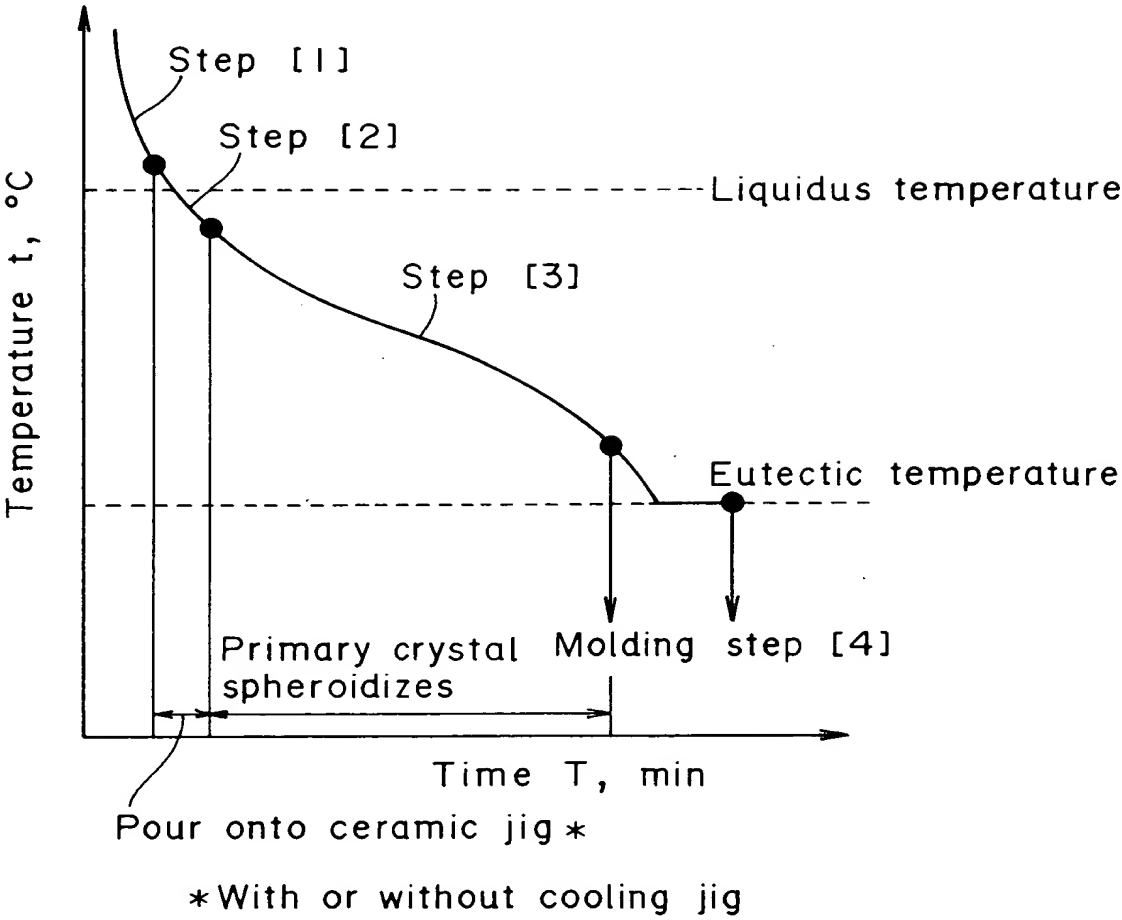


FIG. 60

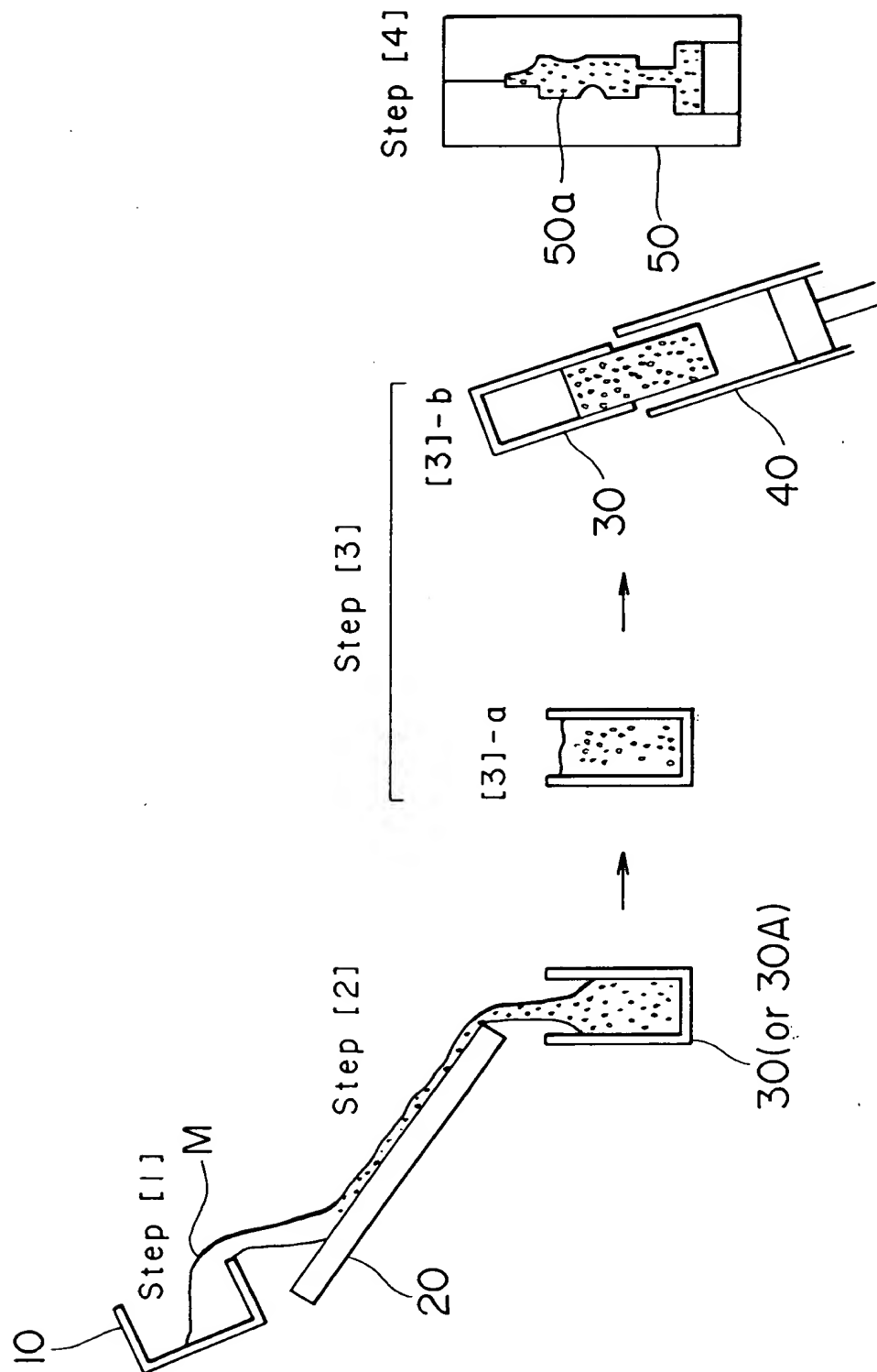


FIG. 61

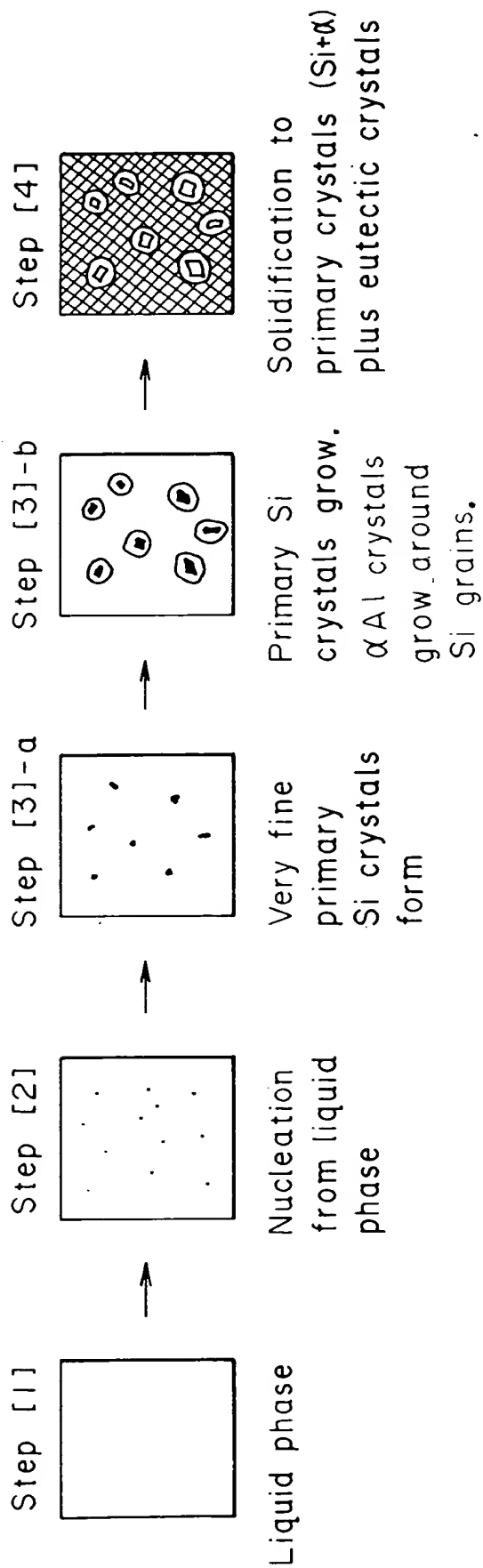
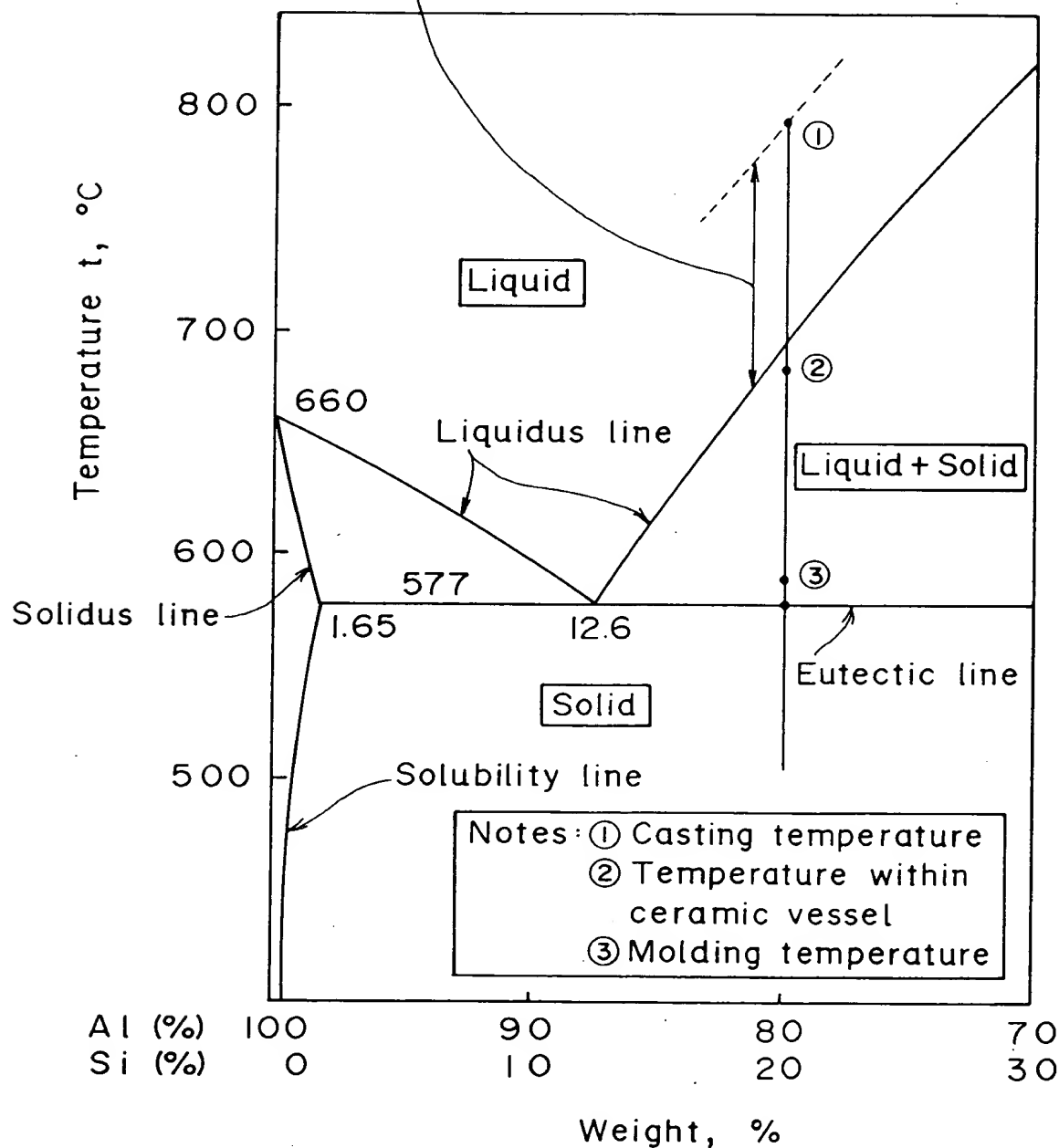


FIG. 62

Superheated to no more than 300°C
(with cooling jig) above liquidus temperature



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

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FIG. 63

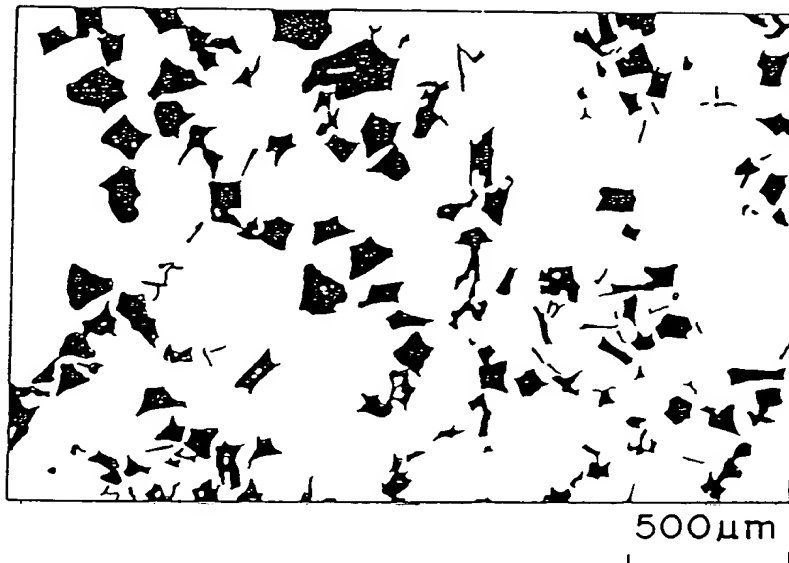


FIG. 64 Prior Art



FIG. 65

Superheated to no more than 100°C
(without cooling jig) or 300°C
(with cooling jig) above liquidus temperature

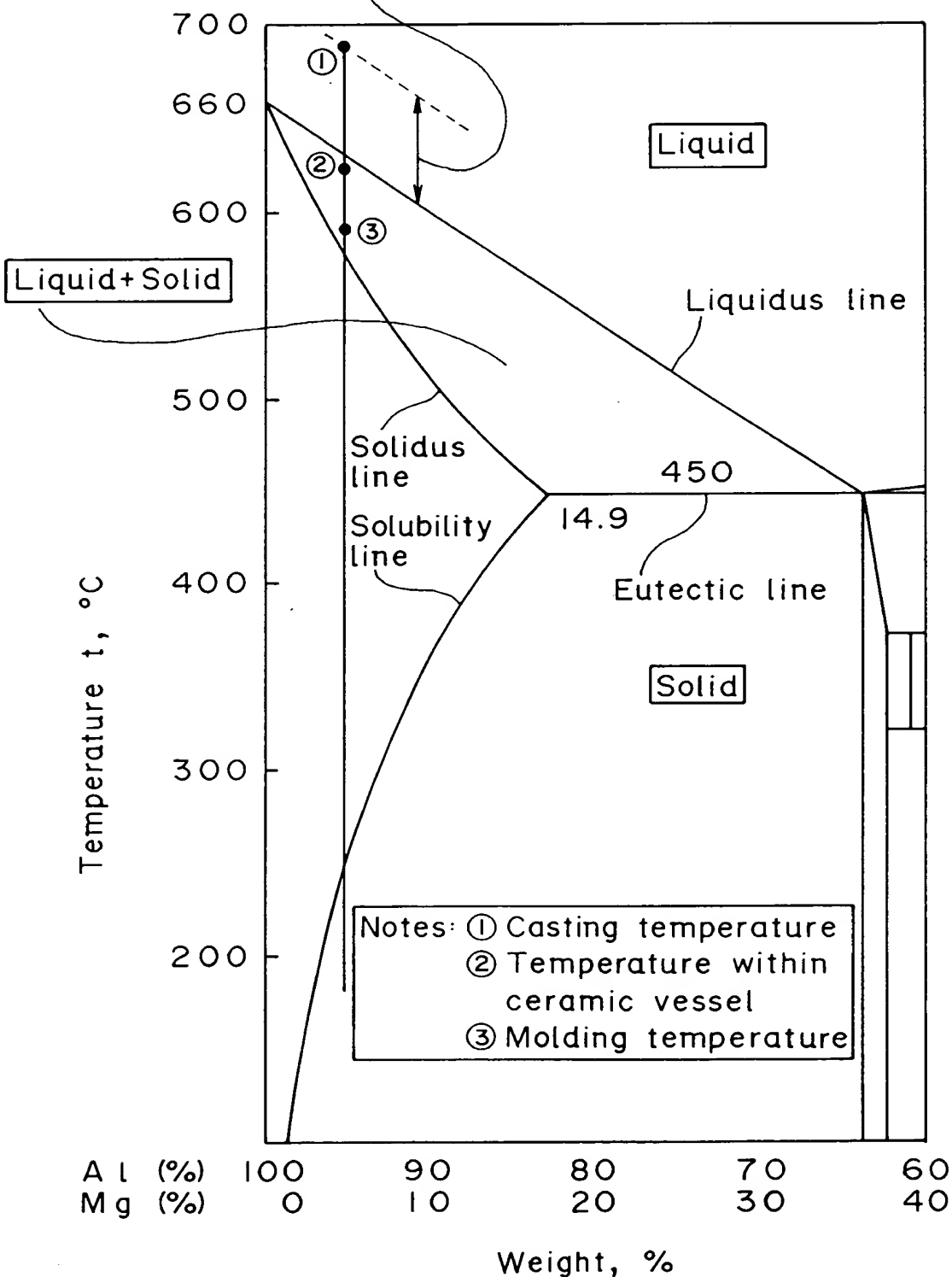


FIG. 66

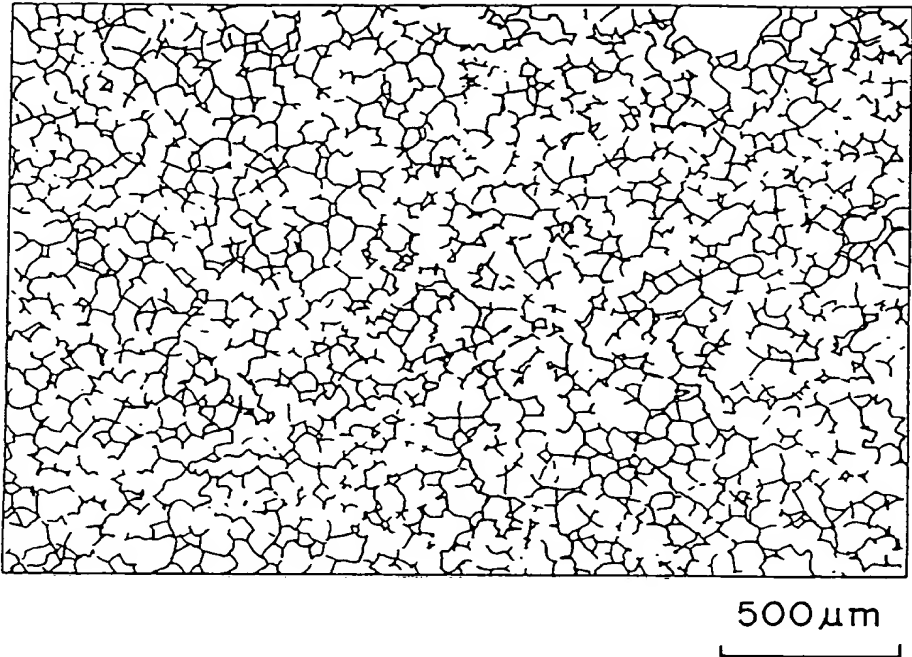


FIG. 67 Prior Art

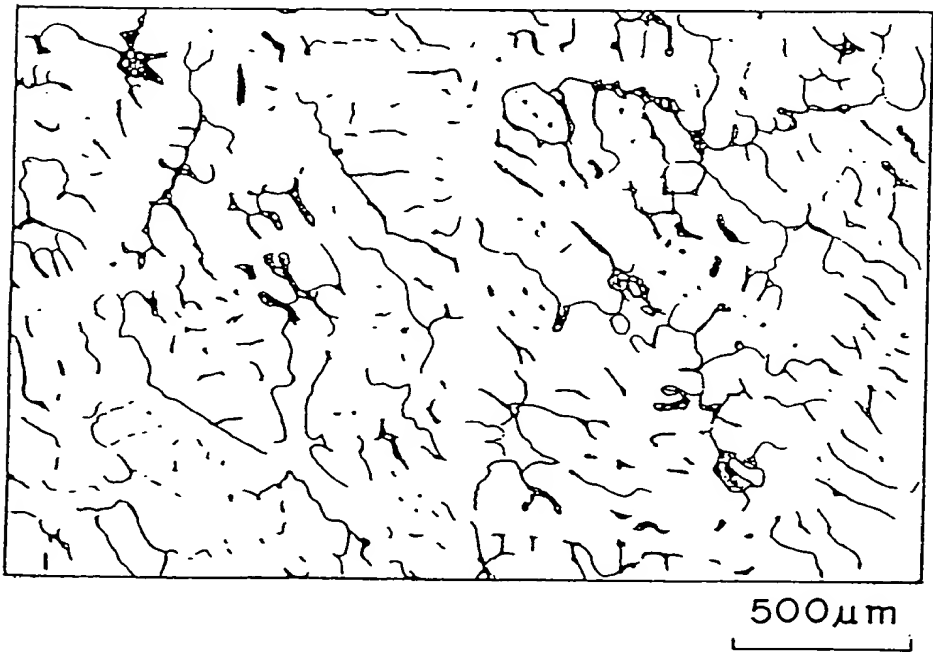
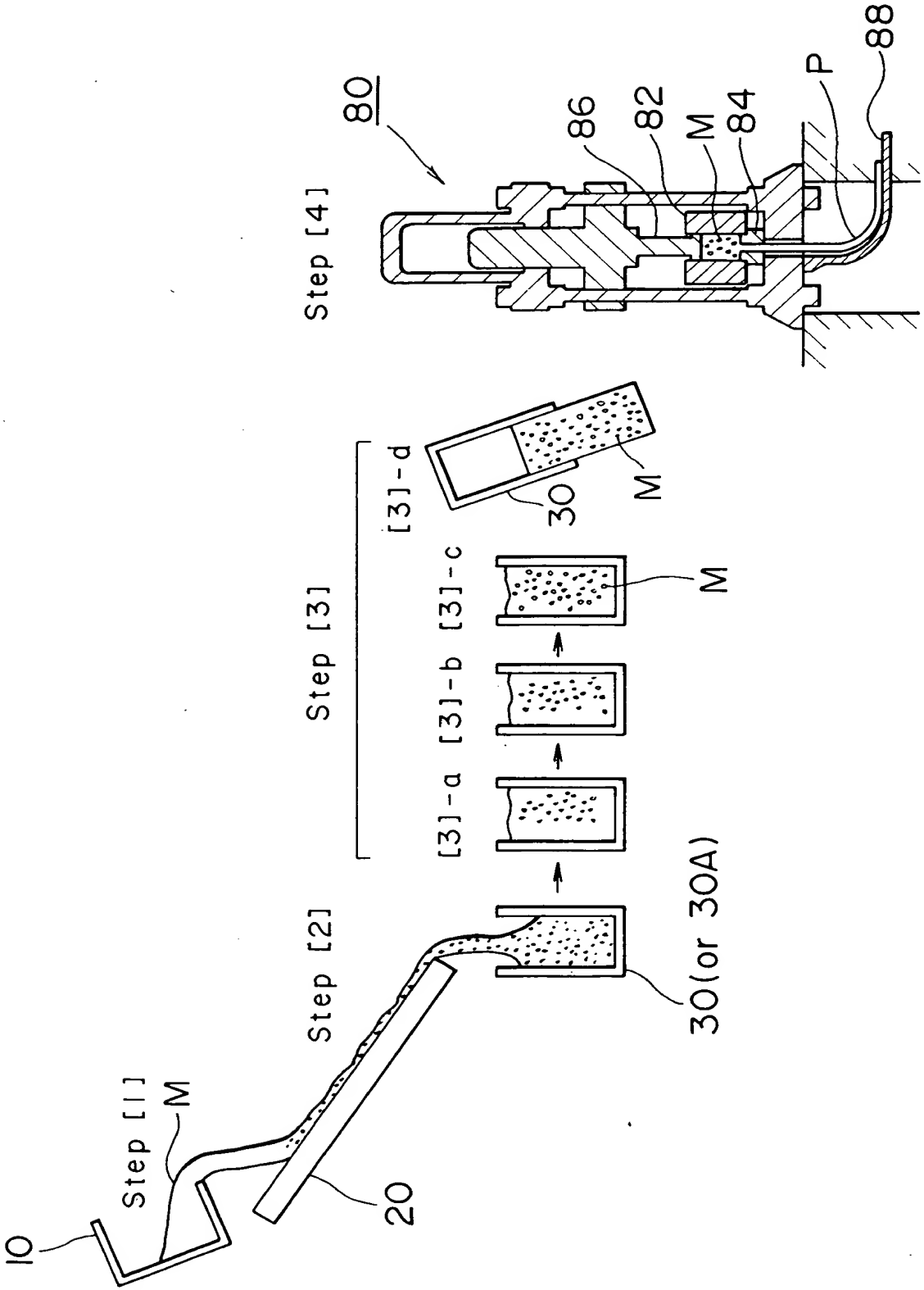


FIG. 68



APPROVED	O.G. FIG.	
BY	CLASS	SU&CLASS
DRAFTSMAN		

FIG. 69(a)

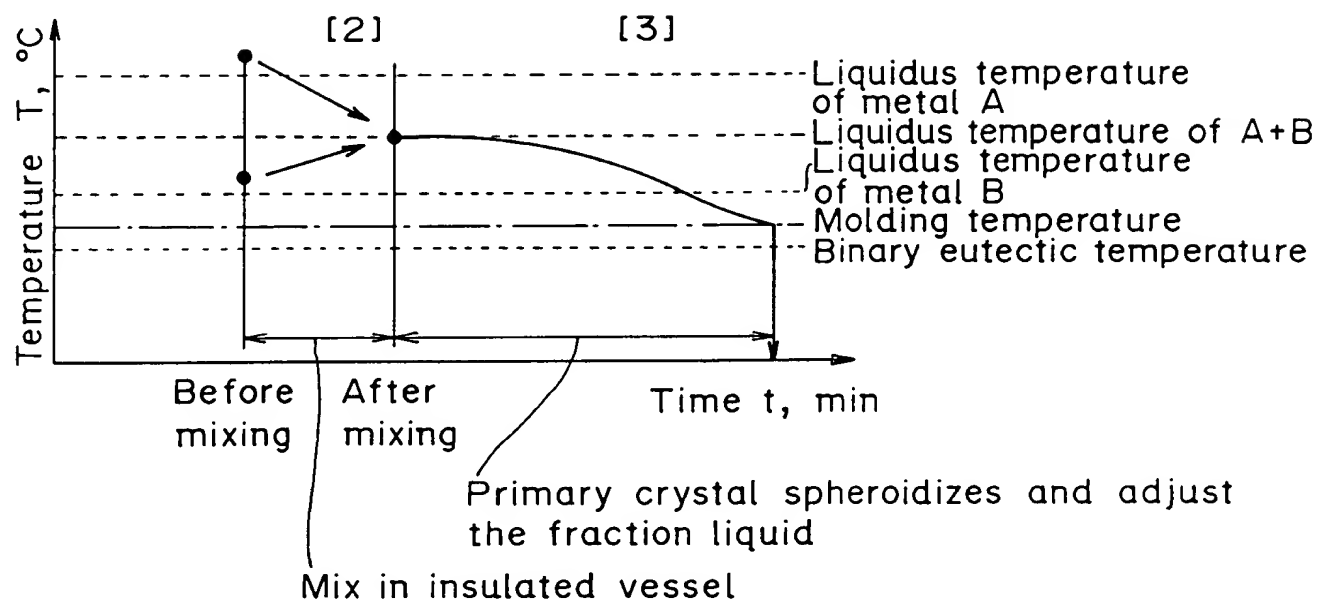


FIG. 69(b)

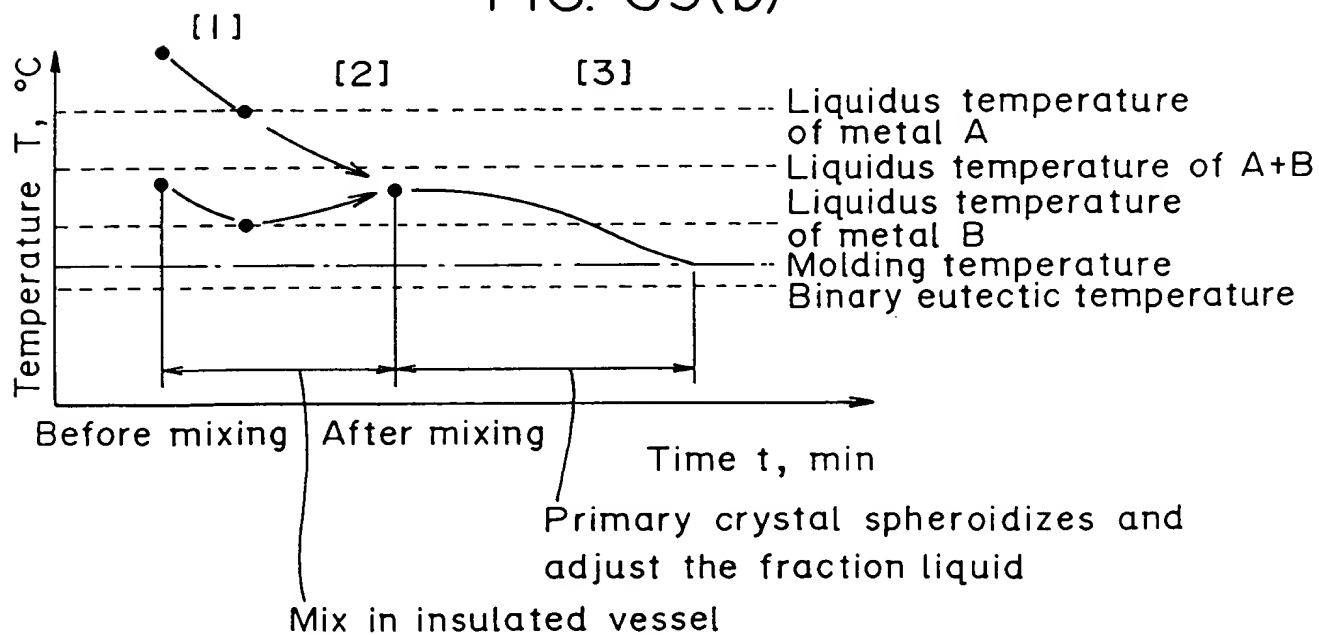


FIG. 70

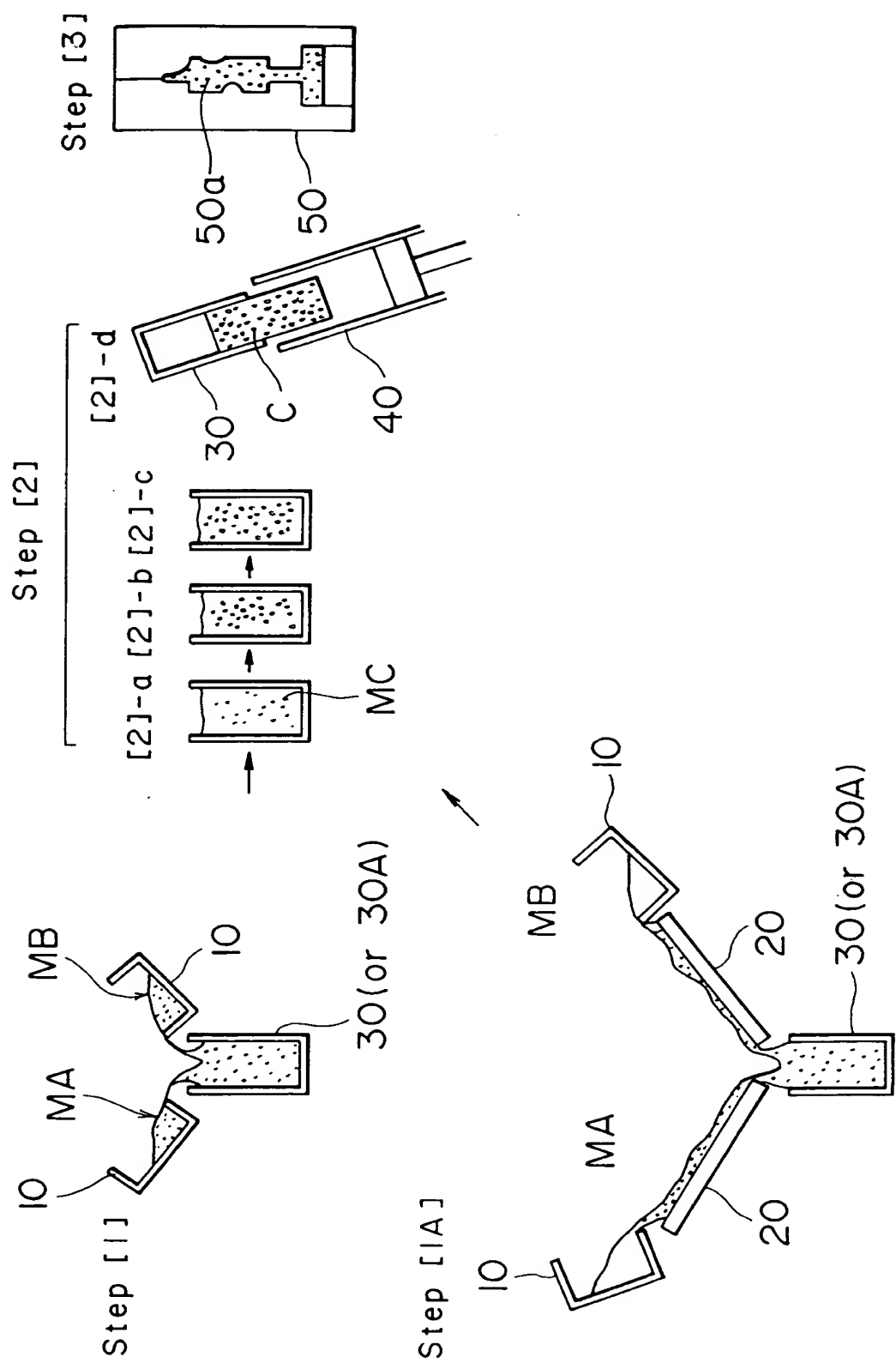


FIG. 71

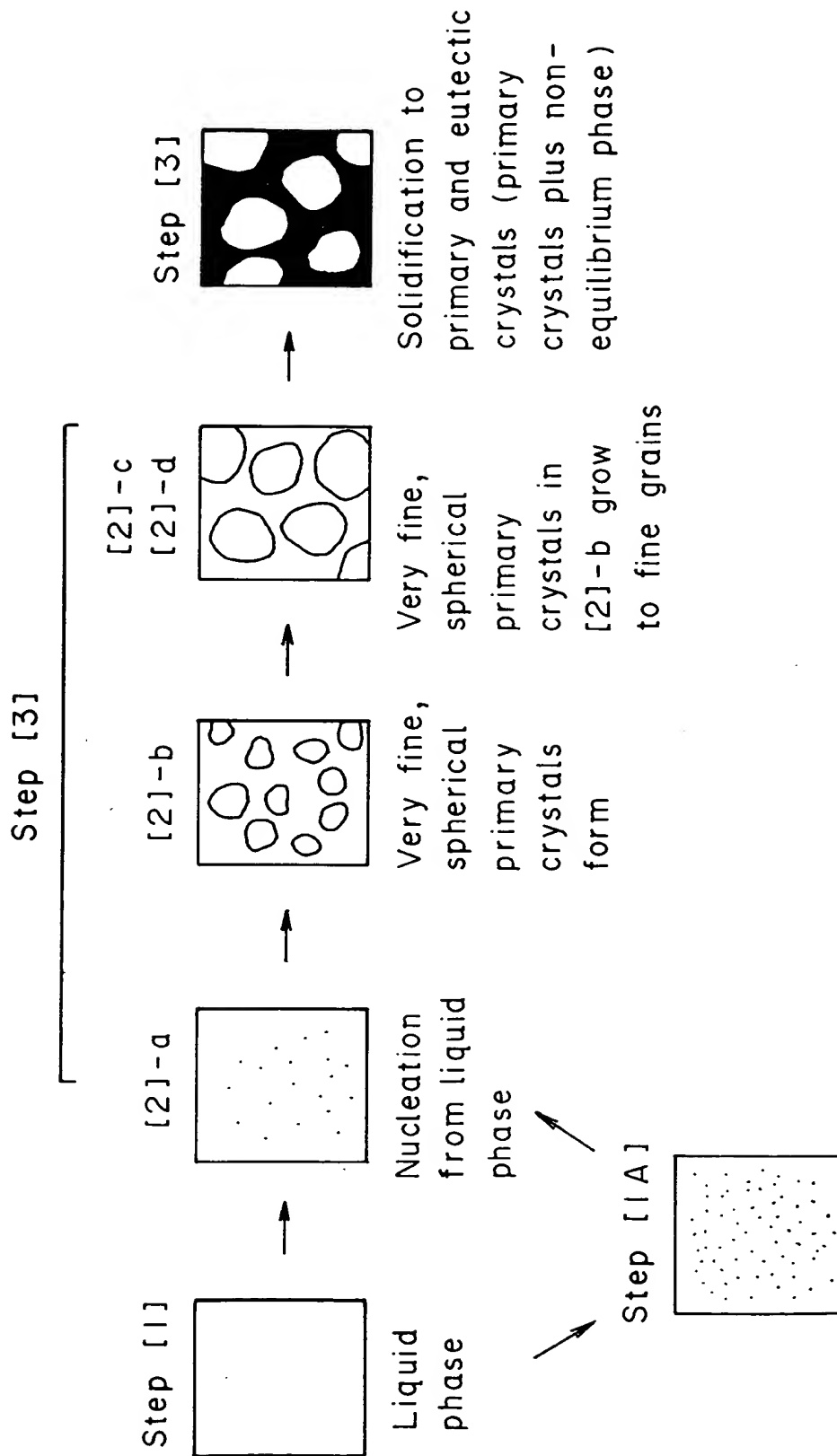


FIG. 72

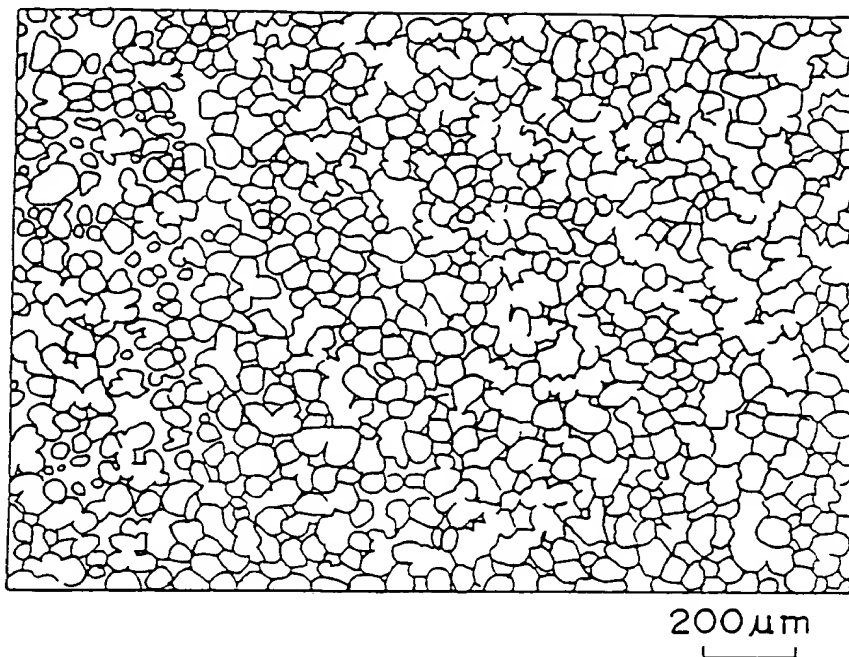


FIG. 73 Prior Art

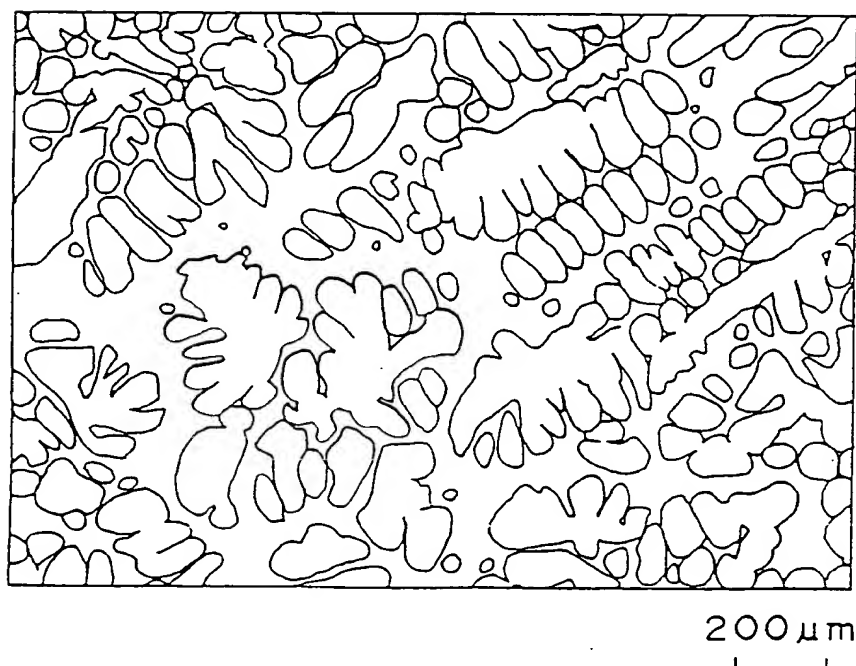


FIG. 74

